STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

In the Matter of the	)	
	)	
Proposed Revision to the Collocation	)	
Tariffs to Eliminate Charges for DC	)	**ICC Docket No. 05-0675**
Power on a Per Kilowatt-hour Basis	)	
and to Implement Charging on a Per	)	
Amp Basis	)	

REPLY BRIEF OF JOINT CLECS

CIMCO COMMUNICATIONS, INC., COVAD COMMUNICATIONS COMPANY, MCLEODUSA TELECOMMUNICATIONS SERVICES, INC., MPOWER COMMUNICATIONS CORP., AND XO COMMUNICATIONS SERVICES, INC.

MAY 12, 2006

PUBLIC VERSION

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CIMCO Communications, Inc., Covad Communications Company, McLeodUSA Telecommunications Services, Inc., Mpower Communications Corp. d/b/a Mpower Communications of Illinois and XO Communications Services, Inc. (collectively, "Joint CLECs") submit this Reply Brief in response to the Initial Briefs of Illinois Bell Telephone Company ("AT&T Illinois" or "AT&T") and the Commission Staff. For convenience and to facilitate preparation of a single Reply Brief on behalf of these carriers, Joint CLECs have organized this Reply Brief using the outline of AT&T's Initial Brief. Each numbered and lettered subsection of this Reply Brief responds to the corresponding section or subsection of AT&T's Initial Brief.

I. AT&T'S "Introduction" Seriously Mis-States the Evidence and Issues in This Case. (Response to Section I of AT&T's Initial Brief)

AT&T's Initial Brief seriously mis-states the evidence and minimizes the extent of the outstanding issues in this case. To read AT&T's text in isolation, one would get the impression that the CLECs and Commission Staff are in general agreement with AT&T on the basic propositions underlying this case, and all that remains to be resolved by the case are a few remaining implementation questions concerning what AT&T misleadingly calls its "per amp" proposal. Such an impression would be far from the truth. As the Joint CLECs made clear in our Initial Brief, we dispute the need for *anything* to happen in this proceeding, other than a directive from the Commission to AT&T to measure and to bill CLECs for collocation power on the basis of usage, just as the Commission ordered AT&T to do in 1998.[1] If AT&T is convinced that the return-side metering system that AT&T engineered and the power measuring units ("PMUs") it elected to buy and install are incapable of accurately measuring the CLECs' collocation power

[1] Illinois Commerce Commission, Docket Nos. 96-0486 and 96-0569, *Investigation into Forward-Looking Cost Studies and Rates of Ameritech Illinois for Interconnection, Network Elements, Transport and Termination of Traffic*, Second Interim Order at 99 (Feb. 17, 1998) ("Illinois 1998 Order").

usage, then the record shows there are other alternatives AT&T can implement with either no or minimal changes to its current tariffs – including taking periodic measurements of the CLECs' power usage with hand-held amp meters.[2] Joint CLECs also strenuously oppose AT&T's revised proposed "self-certification" process, which would shift to CLECs the burden of measuring and reporting their collocation power usage. Indeed, adoption of that process would both depart from the directive to AT&T in the Illinois 1998 Order, as well as deviate from AT&T's original tariff proposal in this case, which contained ***no*** requirement for CLECs to take power readings and, correspondingly, ***no*** provision for audits by AT&T.[3] Thus, AT&T's assertion that "this case has effectively come down to the question of whether the mechanics for the 'per amp' process set forth in RAS-14 are appropriate"[4] is simply wrong. AT&T's assertion ignores the evidence in this case that demonstrates there is no need for a self-certification process such as AT&T presented in RAS-14. Based on the evidence compiled in this case, the Commission can and should decide this case *without even having to consider* "the mechanics for the 'per amp' process set forth in RAS-14."

Moreover, AT&T's use of the phrase "the 'per-amp' proposal" to describe its final position in this case is an attempt to rewrite the events of this proceeding. What AT&T *filed to initiate this case* was in fact a "per-amp" proposal, as it proposed that (1) AT&T be allowed to bill CLECs for collocation power usage on a per-amp rather than a per-kilowatt-hour ("kWh") basis, (2) that the nonrecurring charges be eliminated and (3) the per-amp rate be set at $9.80 per

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2 If AT&T elects this option, it would likely eliminate or amend some portion of its nonrecurring charges.

3 Moreover, Joint CLECs are unaware of any other state commission that has ordered collocators to take periodic, physical readings of their own power usage and submit those readings to the incumbent local exchange carrier ("ILEC"), as AT&T here proposes. Therefore, adoption of AT&T's self-certification proposal would be unprecedented.

4 AT&T Initial Brief at 2.

amp per month. Adoption of those tariff changes – to which the Joint CLECs do not object – is all that would be required to convert from the current basis of measuring and billing CLECs' collocation power usage on a per-kWh basis to a per-amp basis. AT&T could adopt these tariff changes to abandon its return-side power metering system, because AT&T could measure CLECs' collocation power usage on a per-amp basis by taking periodic readings at the CLECs' collocations using hand-held amp meters, and billing CLECs for their power usage on the basis of those readings. Thus, these are the only tariff changes that would be necessary in this docket to give AT&T the complete relief it sought through its original tariff filing in this case.[5]

The *rest* of what AT&T calls its "per-amp proposal" – which is a completely different billing system proposal – was not introduced until AT&T's rebuttal testimony, some six months after its initial tariff filing. Joint CLECs object to the fundamental provisions of AT&T's self-certification proposal, including (1) the requirement that CLECs take periodic physical readings of their collocation power usage and submit the results to AT&T (nowhere mentioned in AT&T's initial tariffs or in its direct testimony in this case), (2) the requirement that CLECs take such physical readings every six months (also not mentioned in AT&T's initial tariffs or in its direct testimony), and (3) the provisions for audits and associated backbilling by AT&T (which is not necessary if AT&T continues to be responsible for measuring CLECs' collocation power usage).[6] By persisting in calling its self-certification proposal a "per amp proposal", AT&T must recognize that its submission of a completely new tariff proposal six months into this case that went outside the bounds of its original tariff filing presents a serious legal issue.[7] So as not to

[5] *See* Jt. CLEC Initial Brief at 19-23 and 38-42.

[6] As discussed at pages 51-67 of Joint CLECs' Initial Brief and in Section IV of this Reply Brief, Joint CLECs take issue with other details of AT&T's self-certification proposal.

[7] *See* Jt. CLEC Initial Brief at 39-43.

assist AT&T in misleading the Commission, Joint CLECs will continue to refer to AT&T's proposal in RAS-14 as the "self-certification" proposal – since that is what it is, and that is all that AT&T is now proposing.

Joint CLECs emphasize that this proceeding is not an arbitration under Section 252(b) of the federal Telecommunications Act,[8] but rather is a tariff proceeding under Section 9-201(b) of the Public Utilities Act.[9] Therefore, the burden of proof to establish the justness and reasonableness of its proposed tariffs is on AT&T.[10] AT&T has failed to meet its burden of proving that its self-certification proposal is just and reasonable.

Joint CLECs also take issue with the following assertions in AT&T's Introduction.

- "no party submitted evidence to challenge AT&T Illinois' showing that the leakage ranges between 30% and 50%, and averages 47% on a weighted average basis".[11]

This is a specious statement, since no other party *could* have presented any such evidence – it would have required a CLEC to gain access to AT&T central offices and take power usage and leakage readings at numerous places within the central office. Only AT&T (or its authorized agents) is capable of taking the multiple measurements at multiple central offices to determine an "average" leakage at a central office.[12] However, while Joint CLECs acknowledge that AT&T's consultant Telcordia and AT&T witness Muellner took readings of some CLEC collocations at a limited number of AT&T central offices and mathematically calculated an average of their results, AT&T has not shown what the level of leakage is at any of its scores of other central

8 47 U.S.C. § 252(b).

9 220 ILCS 5/9-201(b). See Suspension Order issued October 19, 2005 in this docket.

10 220 ILCS 5/9-201(c).

11 AT&T Initial Brief at 1.

12 *See* Jt. CLEC Initial Brief at 30.

offices.[13] Nor has AT&T shown that the averages it calculated are representative of leakage and underbilling to any individual CLEC across all collocations.[14] As AT&T itself stated in its Initial Brief:

> [A]s both the Telcordia Technologies study and Ms. Muellner demonstrated, the extent of leakage varies from CLEC to CLEC and from collocation site to collocation site.[15]

Additionally, in follow-up testing, Commission Staff, although finding evidence of leakage, was unable to replicate Telcordia's results.[16]

- "Nor does anyone dispute that AT&T Illinois has lost approximately $25,000,000 in DC power charges since 1998."[17]

While Joint CLECs do not dispute that the results at the few collocations tested by AT&T showed that AT&T's power metering system under-recorded usage more often than it over-recorded usage, Joint CLECs do dispute AT&T's contention that it has "lost" approximately $25,000,000 in DC power charges since 1998. AT&T's exaggerated $25,000,000 figure is speculative and unsubstantiated, and based the flawed and limited sample readings taken by Ms. Muellner. It is premised on an estimate of leakage at <u>one</u> central office and a calculation, which can charitably be described as "back of the envelope", performed by an AT&T engineer in April 2002 even before Telcordia had conducted its tests of current leakage at several AT&T central

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13 *See id.* at 24-31.

14 *Id*. Ms. Muellner's testing showed that for some CLECs, AT&T's power metering equipment was recording more current than was actually being delivered to their collocations, which would have resulted in overbilling to those CLECs. *See id*. at 28.

15 AT&T Initial Brief at 83, *citing* AT&T Ex. 5.1 at 29 and AT&T Ex. 4.0 at 12-13.

16 Staff Ex. 3.0 at 4-7.

17 AT&T Initial Brief at 1.

offices.[18] In addition, the exaggerated "loss" is skewed significantly by readings taken from collocation equipment of a particular carrier which should be disregarded because of the identity of that carrier.[19]

Further, any "losses" incurred by AT&T have been totally self-inflicted because (1) AT&T waited *years* before taking any action to address the problems with its return-side power metering systems (and before telling the CLECs about it)[20]; and (2) AT&T could have taken accurate power measurements throughout the 1998-2004 period (and particularly in the first two years, before its PMUs were installed in central offices) using hand-held meters and could have done so without obtaining Commission approval.[21] Moreover, AT&T fails to point out to the Commission that a very substantial portion of whatever "losses" AT&T has incurred were due to underbillings to its merger partner, AT&T Illinois Communications of Illinois, Inc. ("ATTCI").[22] AT&T's speculative and unsubstantiated calculation of its "losses" has no relevance to the outcome of this case.

- "Joint CLECs throw out three proposals that never gain much traction because they themselves merely offer them as 'alternatives' and do not stand behind them

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18 *See id.* at 12. Apparently the only "documentation" of this calculation is an e-mail sent by the AT&T engineer. *Id*.

19 AT&T Ex. 3.0, Sch. MN-6 at 17.

20 *See id.* at 36.

21 *See id.* at 11.

22 According to the Telcordia Report, **BEGIN PROPRIETARY** **END PROPRIETARY** AT&T Sch. MN-6 at 17. Joint CLECs anticipate that a substantial portion of any "losses" incurred by IBT represent underbilling to ATTCI because, before being swallowed by AT&T, ATTCI was one of the two most significant CLECs in Illinois. Indeed, **BEGIN PROPRIETARY** **END PROPRIETARY** *Id*. at 17-18. For the same reason, whatever level of "losses" AT&T may have incurred prior to November 2005 is now substantially diminished since AT&T would no longer be billing ATTCI for collocation power. Additionally, according to Telcordia, a portion of the leakage for which AT&T has presumably underbilled **BEGIN PROPRIETARY** **END PROPRIETARY** *See id*. at 17.

> with an affirmative recommendation . . . 1) shunt-based supply-side metering; 2) supply-side metering using split core transducers; and 3) hand held metering."[23]

As should have been clear to AT&T[24], and by now must be clear from reading Joint CLECs' Initial Brief, Joint CLECs' primary recommendation is that AT&T simply be required to do what it was ordered to do in 1998: bill CLECs for collocation power based on usage.[25] Joint CLECs are not "recommending" that AT&T be *directed* to employ any particular mechanical method to measure power, but Joint CLECs have provided for the record three feasible and viable *alternatives* to AT&T's existing return-side metering system that AT&T can use to measure CLECs' collocation power usage for billing purposes.[26] To be clear, however, and as emphasized throughout this Reply Brief in response to AT&T's self-certification proposal, there is no need for the Commission to consider anything in this case beyond the use by AT&T of hand-held meters to measure collocation power usage.[27]

- "The Staff . . . does not recommend any of them [*i.e.*, the three 'alternatives' identified by Joint CLECs] . . . these metering solutions are expensive, operationally impractical and/or technically unworkable".[28]

This assertion will probably come as a surprise to Staff, who state unequivocally in their Initial Brief: "Staff recommends using a hand-held metering methodology."[29] Staff's endorsement of hand-held metering is based on sound analysis:

– "All parties appear to agree that a hand-held metering methodology is sufficiently accurate to meet the usage-based directive of the Commission. . . If the collocated equipments' power draw remains constant, the snapshot that a hand-held

23 AT&T Initial Brief at 2.

24 *See* Tr. 159-60 (cross of AT&T witness Roman Smith).

25 Jt. CLEC Initial Brief at 13-14.

26 *Id*. at 13-23.

27 *See also* Jt. CLEC Initial Brief at 19-23.

28 AT&T Initial Brief at 2.

29 Staff Initial Brief at 13.

methodology provides would be, in Staff's view, sufficiently accurate to comply with the Commission's usage based directive."[30]

– "A hand-held metering methodology is safe."[31]

– "A hand-held metering methodology would not be expensive to install, operate and maintain. Hand-held meters cost roughly $100.00 to $300.00 per meter . . . Hand-held meters, moreover, are portable in that they can be moved from one DC power arrangement to another, central office to central office, and used over and over again."[32]

– "Another benefit of a hand-held metering methodology is that it is unlikely to be disruptive to install."[33]

In addition, Staff concluded that a hand-held metering approach "would accurately establish what the actual loaded amps are for any single collocation arrangement" and would meet the Commission's usage-based directive.[34]

- A hand-held metering approach is "expensive, operationally impractical and/or technically unworkable."[35]

Joint CLECs find it mind-boggling that AT&T would make this assertion, since hand-held amp meters are exactly what AT&T, under its self-certification proposal, expects CLECs to use to measure their own usage in order to report it to AT&T, and are exactly what AT&T intends to use to conduct its audits of CLECs' power usage.[36] In fact, no method other than

30 *Id*. at 11.

31 *Id*. at 12.

32 *Id*.

33 *Id*. at 13.

34 *Id*. at 16.

35 AT&T Initial Brief at 2.

36 McLeodUSA Ex. 107 (AT&T Response to QCC Data Request 3.13); Tr. 335-36. Joint CLECs reiterate that they oppose AT&T's self-certification proposal and that the record demonstrates it should be rejected by the Commission. Moreover, under AT&T's original tariff amendment, in which it converted the per kWH rate to a per amp rate, presumably AT&T was going to do the measurements likely using some device since there were no other provisions as to the method of measuring to bill on a per amp basis. It was only well into these proceeding, AT&T

using hand-held meters has been identified in the record for CLECs to take physical site readings of their collocation power usage or for AT&T to audit their usage. In any event, as Staff concluded (see citations from Staff's Initial Brief immediately above) and as the record amply demonstrates, AT&T's negative assertions about a hand-held metering approach are wrong. AT&T can use hand-held amp meters to measure the CLECs' collocation power usage in an efficient and cost-effective manner and use those readings to bill, thereby continuing to fulfill the obligations placed on it by the Illinois 1998 Order, without creating an unnecessary and burdensome system of physical readings, self-certifications and reporting by CLECs and duplicative audits by AT&T.[37]

- "The only viable solution before the Commission is the AT&T Illinois 'per amp' [sic] proposal, which permits CLECs to certify their actual usage of DC power in amperes ("amps") and which obligates AT&T Illinois to bill on that basis."[38]

This assertion is patently false. It is a viable solution for AT&T to measure the CLECs' collocation power usage with hand-held meters, in amps, and to bill CLECs on the basis of those readings. Moreover, the use of hand-held meters by AT&T is "usage-based and renders accurate bills" and "is also cost effective", thereby fully satisfying the criteria posited by AT&T.[39] In fact, hand-held metering by AT&T is *more* efficient and cost effective than AT&T's self-certification proposal, because under the hand-held metering approach all the readings will be taken by AT&T (just as is the case today) without the need for the duplicative efforts by the parties that are a centerpiece of AT&T's self-certification proposal.

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rebuttal testimony to be exact, that AT&T even proposed the self-certification process that placed the burden of measuring and billing on CLECs.

37 *See* Jt. CLEC Initial Brief at 19-23 and 39-45.

38 AT&T Initial Brief at 2.

39 *Id*.

- "The benefits that CLECs derive under the 'per amp' [sic] proposal carries with it the natural obligation to take periodic measurements of its [sic] actual usage so that AT&T Illinois can accurately bill."[40]

All of the benefits that AT&T associates with its self-certification proposal will be realized if AT&T continues to be responsible, as it is today, for measuring the CLECs' power usage, whether by using hand-held meters or one of the other alternatives Joint CLECs have identified. The "natural obligation" in this context is for AT&T to measure for billing purposes the amount of power it delivers to the CLECs, just as does any supplier of electricity – and that is where the Commission placed this responsibility in the Illinois 1998 Order.

- "AT&T Illinois 'per amp' [sic] proposal satisfies the relevant policy objectives. It is usage based . . . produces accurate charges so that CLECs are not underbilled or overbilled for DC power . . . is cost-effective because it uses the existing infrastructure therefore requires no capital investment . . . is also easy to administer and will minimize any disruption of CLEC operations . . . .[41]

AT&T's "relevant policy objectives" are a set of criteria that AT&T manufactured to self-justify its own self-certification proposal. Nevertheless, all of the above statements are fully applicable to a system in which AT&T measures the CLECs' collocation power usage by using hand-held meters. In fact, measurement by AT&T using hand-held meters is **more** cost-effective than AT&T's self-certification proposal because it does not require duplicative readings by AT&T and the CLECs, or a heretofore unnecessary system of reporting by CLECs. Further, measurement of collocation power usage by AT&T using hand-held meters – unlike AT&T's self-certification proposal – creates **no** disruption of CLEC operations, because it does not require CLECs to take periodic physical readings of their collocation power usage, obtain certifications by corporate officers, report results to AT&T, or review and (if necessary) dispute

[40] *Id.* at 4.

[41] *Id*. at 5.

AT&T audit reports. Instead, if AT&T continues to be responsible for measuring and billing the CLECs' collocation power usage, just as it is today pursuant to the Illinois 1998 Order – albeit by using hand-held meters to take periodic amperage readings rather than by using the existing return-side metering arrangements – CLECs will merely have to receive, review and pay their bills from AT&T for collocation usage, just as they do today and just as any other electricity consumer would do.

In summary, and as demonstrated both in Joint CLECs' Initial Brief and this Reply Brief, AT&T's self-certification proposal was nowhere reflected in its initial tariff filing, was introduced six months into this case, would unjustifiably shift the costs and administrative burdens of measuring collocation power usage from AT&T to CLECs (while AT&T continues to collect the *same* rate for power supplied), would increase AT&T's revenues due to such provisions as the minimum amp proposal, and would increase the total resource costs of this activity. AT&T failed to show that this self-certification proposal should be given any consideration by the Commission whatsoever.

II. Four Years After Learning That There Were Serious Problems with the Return-Side Metering System That it Had Engineered and Installed, AT&T is Finally Disclosing That the System it Elected to Install Cannot Be Relied on to Accurately Measure Collocation Power Usage. (Response to Section II of AT&T's Initial Brief)

A. Origins of Return-Side Power Metering in Illinois. (Response to Section II.A of AT&T's Initial Brief)

Joint CLECs have no particular comments on AT&T's discussion of its development and implementation of its return-side power metering system in Section II.A of its Initial Brief. Joint CLECs, however, emphasize the following points, which were discussed in our Initial Brief:

– AT&T developed and implemented the return-side metering system on its own, with no consultation with CLECs.[42]

– Based on common industry knowledge at the time and the configuration and characteristics of collocated equipment installed in ILEC central offices, AT&T should have known at the time it was designing and installing its return-side power metering system that this system would be subject to frame current leakage (as AT&T's own consultant, Telcordia Technologies, Inc. ("Telcordia"), told it in 2002).[43]

– During the time between the filing of its compliance tariff for power metering and the installation of its return-side power metering arrangements, AT&T could have measured CLECs' collocation power usage with hand-held metering units.[44]

B. While AT&T's Return-Side Power Metering System is Inaccurate Generally, AT&T Has Failed to Prove the Extent of the Inaccuracy. (Response to Section II.B of AT&T's Initial Brief)

Joint CLECs do not dispute that AT&T's return-side power metering system is not accurately measuring CLECs' collocation power usage in kWh, at least in some instances.[45]. Joint CLECs do dispute AT&T's claims that the under-measurement ranges between 30%-50%, or that it averages 38% (on an arithmetic average basis) or 47% (on a "weighted" average basis as calculated by AT&T) across all collocation sites and AT&T central offices.[46] All AT&T has shown is the leakage it or its consultant measured on certain days at certain selected collocations at just a few of AT&T's scores of central offices.[47] The evidence on this point is summarized in detail at pages 25-30 of Joint CLECs' Initial Brief and need not be repeated here.

42 *See* Jt. CLEC Initial Brief at 8-9.

43 *Id*. at 9.

44 *Id*. at 11.

45 Given the very limited extent of AT&T's testing, it is impossible to conclude that the return-side metering arrangement is inaccurately measuring usage at every collocation in every central office.

46 *See* AT&T Initial Brief at 10-12, where these figures are presented.

47 In light of the fact that Telcordia, AT&T employee Ms. Muellner and Mr. Murray of Staff did not measure the same leakage amounts when they conducted tests at the same central office on different days, it is reasonable to conclude that in fact, the amount of current leakage at individual collocation sites varies from day to day.

Further, even at the offices where AT&T conducted tests, the 30% to 50% current leakage range reported by AT&T in no way bracketed the leakage at individual CLEC collocations, on either the high side or the low side.[48] Moreover, AT&T's testing at these central offices showed that the amounts of frame current leakage and/or current imbalance were very small (close to zero) for some collocations.[49] AT&T's testing also showed that its return-side power metering equipment was measuring **higher** kWh usage for some CLECs at the PMU than was being delivered to their collocations.[50]

In any event, because Joint CLECs are not advocating that AT&T be required to use the existing return-side metering arrangements, and are not advocating (and in fact opposed) that the problem should be addressed by applying a general "adjustment factor" to the kWh usage recorded by the return-side PMUs[51], determining the exact amount of the leakage from AT&T's flawed return-side power metering system is not relevant or necessary to resolve the issues in this case. The only real purpose to Section II.B of AT&T's Initial Brief appears to be to allow AT&T to solicit the sympathy of the Commission for AT&T's engineering mistakes. Regardless of the magnitude of the leakage, it does not justify AT&T's proposal to shift the costs and burdens of measuring collocation power usage to the CLECs.

AT&T states that "[w]hat AT&T Illinois initially believed would be a workable DC power metering architecture did not perform as expected."[52] Joint CLECs reiterate that the record (including the report of AT&T's own consultant) shows that AT&T should have known at

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48 *See* Jt. CLEC Initial Brief at 25-30.

49 *See id*. at 26-28.

50 *See id*. at 28.

51 *See id*. at 23 and 30-31.

52 AT&T Initial Brief at 9.

the time it was engineering and installing its return-side power metering system that it would not accurately measure the DC power being used at CLEC collocation sites.[53] Indeed, the complete absence of any acknowledgment by AT&T of any responsibility for the problems created by its own poorly-informed engineering decisions is distressing. One can imagine the adverse reaction of the Commission (and customers) if Commonwealth Edison, for example, came before the Commission and stated, "Oops, one of our nuclear plants doesn't perform as we expected – the reactor just isn't boiling water like we thought it would -- so we are going to abandon it, keep the money we collected from our customers to pay for it, and use a different means of obtaining electricity to deliver to our customers." Yet that is, essentially, AT&T's posture in this case.

C. AT&T's Estimates of its Self-Inflicted "Losses" from its Own Flawed Power Metering System Are Completely Speculative and Unsubstantiated (Response to Section II.C of AT&T's Initial Brief).

AT&T claims that it has lost "roughly" $25,000,000 in unbilled DC power due to the flawed return-side power metering arrangements that it engineered and installed.[54] AT&T's figure is speculative and unsubstantiated. Further, even putting aside AT&T's erroneous and uninformed engineering decision, the "losses" that AT&T claims to have incurred would have been mitigated if AT&T had responded to the problems it has encountered in a timely manner. In short, AT&T's calculation of the "losses" it claims to have incurred from its flawed power metering system should have no bearing on the resolution of the issues in this case.

Joint CLECs emphasize the following points about AT&T's claimed losses:

– AT&T claims that it was not compensated for any power supplied to collocators in 1998 through mid-2000, while it was engineering and installing a power

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53 *See* Jt. CLEC Initial Brief at 8-9.

54 AT&T Initial Brief at 12-14.

measurement system.[55] However, AT&T easily could have measured collocators' power usage during this period using hand-held metering units.[56] Any "losses" incurred by AT&T during this period are solely due its own failure to take reasonable actions to mitigate (in fact, eliminate) its "losses".

– After discovering in early 2002 that its return-side power metering system was not taking accurate measurements of CLECs' collocation power usage, AT&T could have ceased using that system and measured CLECs' collocation power usage with hand-held metering units. It could have done so without seeking and obtaining Commission approval because this Commission never mandated a specific measurement approach.

– AT&T also claims that it has lost revenue when it has been unable to record CLECs' collocation power usage due to the failure of PMUs.[57] Again, where a PMU has failed, and pending its replacement, AT&T could have measured the affected CLECs' collocation power usage with a hand-held meter.[58]

– AT&T's estimate of the losses it has incurred due to underbilling of DC power since its flawed return-side power metering system was installed in 2001 is based on an extrapolation by an AT&T engineer from leakage measured at a *single central office* in early 2002.[59] Its estimate of "losses" incurred after the system was installed is based on the average leakage figure that it measured in testing at just a handful of collocation sites at a handful of its scores of central offices.[60] In short, its entire estimate of "losses" is a function of its speculative assertion that the amounts of leakage measured by testing on a few days at a few collocations at a few central offices can be extrapolated to every day at every collocation in every central office for over six years. As shown earlier in this Reply Brief and at pages 24-30 of Joint CLECs' Initial Brief, this critical underlying assumption has not been proven.

– Because AT&T calculated an annual dollar loss figure and extrapolated it over the entire period, its estimates of "losses" are further dependent on the assumptions

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55 *Id*. at 13.

56 Had AT&T done so, it might well have realized what an efficient, low-cost solution the use of hand-held metering units provided, and it might have abandoned the idea of trying to design and implement a fixed metering architecture before one was ever installed.

57 AT&T Initial Brief at 13.

58 Further, AT&T has not indicated that it has taken any action against the vendor of the PMUs to seek compensation for the high rate of PMU failures that AT&T claims it has experienced. (*See* AT&T Initial Brief at 14-15; Jt. CLEC Initial Brief at 11.) If the high PMU failure rate AT&T claims it has experienced is factual, it should certainly lead any reasonable management to investigate whether the equipment supplier is culpable. Again, AT&T has failed to demonstrate that it took reasonable actions to mitigate its losses.

59 AT&T Initial Brief at 12.

60 *Id*. at 13.

that throughout the six-year period there were the same number of CLEC collocations in place at AT&T's central offices, each collocation had the same amount of equipment installed, and the power usage on each CLEC power delivery arrangement was the same. Obviously, these assumptions are suspect on their face.

– AT&T's estimates of "losses" include "losses" due to underbillings to AT&T's merger partner, ATTCI, when it was an independent entity and collocated in numerous AT&T central offices.[61]

– AT&T's estimates of "losses" also include "losses" due to underbillings to AT&T's own affiliate AADS.[62]

– Although AT&T discovered problems with its return-side power metering system in early 2002, characterized the problems at that time as "big", and developed an estimate of a $2.4 million annual revenue loss at that time, AT&T waited more than 3-1/2 years before taking any action to attempt to rectify the problems and stop its "losses."[63]

Further, when one considers that AT&T did not notify its customers during this period of the problems with its power-metering system, and in fact continued to collect substantial non-recurring charges from CLECs for the installation of the power-metering arrangements that AT&T already knew were flawed, ATT's contention that CLECs have reaped a "windfall"[64] must be rejected out of hand.

Joint CLECs agree with AT&T that collocation power usage should be accurately measured and billed, and they agree with AT&T that steps should be taken (however late) to

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[61] Before being acquired by AT&T, ATTCI was one of the two most significant CLECs operating in Illinois, the other being MCI. If the Commission were to look at AT&T's claimed "losses" on a CLEC-by-CLEC basis, it would not be surprising to find that a very substantial part of AT&T's "losses" represented underbillings to ATTCI, the company it now owns.

[62] As noted earlier in this Reply Brief and as shown in the Telcordia Report (AT&T Sch. MN-6 at 17-18) **BEGIN PROPRIETARY**

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[63] *See* Jt. CLEC Initial Brief at 2, 9-10, 32.

[64] AT&T Initial Brief at 14.

provide for accurate measurements.[65] However, AT&T's speculative estimates of its previous, self-inflicted "losses" have no bearing on the fundamental issue in this case, which is whether AT&T should be allowed to use the flaws in the power-metering system it engineered and installed as an excuse to shift to CLECs the costs and burdens of measuring collocation power usage.

D. AT&T Has Failed to Show That It Has Taken Appropriate Actions with its Vendors to Address the High Failure Rate It Claims to Have Experienced with the PMUs in its Return-Side Metering System. (Response to Section II.D of AT&T's Initial Brief)

AT&T asserts that the return-side metering system it engineered and installed is "unworkable" because AT&T has experienced high failure rates with the PMUs that measure the collocator's electric power usage.[66] AT&T acknowledges that the manufacturer identified a problem with the CPU cards and attempted a fix, but AT&T indicates the fix was ineffective.[67] AT&T's discussion shows nothing more than that the PMU failures it has experienced reflect a problem with vendor-supplied equipment. Indeed, AT&T notes that "the manufacturer issued a product defect notice",[68] but AT&T gives no indication as to whether either the costs of replacing the defective PMUs or the losses (in terms of unbilled collocation power) AT&T claims to have incurred as a result are covered by warranty. Nor has AT&T indicated if it is

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65 Jt. CLEC Initial Brief at 13.

66 AT&T Initial Brief at 14-15.

67 *Id*.

68 *Id*. at 14.

pursuing any other remedies against the manufacturer to recoup its losses.[69] Nor does AT&T explain or justify what these losses have to do with its self-certification proposal.

Additionally, AT&T states that a PMU outage due to a failed circuit card typically lasts two or three days until the card can be replaced,[70] which seems like an unduly long time given the high rate of circuit card failures AT&T claims to have experienced. One would expect that in light of the high rate of circuit card failures AT&T claims to have experienced over the past three years (with the associated loss of ability to measure and bill for CLECs' collocation power usage), prudent management would maintain a sufficient inventory of replacement cards to enable failed circuit cards to be replaced more promptly.

In short, AT&T's discussion of the PMU failures it has experienced does nothing more than raise more questions about why AT&T has not been more proactive about solving these alleged problems, including whether AT&T has taken any action against the manufacturer or vendor of this equipment to get the problems fixed and obtain compensation for its losses. AT&T's argument does not justify abandoning the PMU-based power metering system that CLECs have paid for through substantial nonrecurring charges. AT&T's adverse experience with the PMUs it elected to purchase and install does not provide any justification to shift the costs and administrative burdens of measuring collocation power usage to the CLECs.

E. The Deficiencies with AT&T's Return-Side Power Metering System Do Not Justify AT&T's Proposal to Shift the Costs and Burdens of Measuring Collocation Power Usage to CLECs. (Response to Section II.E of AT&T's Initial Brief)

[69] *See* McLeodUSA Ex. 105 (AT&T Response to Joint CLEC Data Request 2.7 (Revised)), in which AT&T refused to state whether it has taken action against Marconi, other than stating that AT&T has no "pending" action against Marconi.

[70] *Id*.

Joint CLECs agree with AT&T and Staff that the return-side metering system that was engineered and installed by AT&T is not accurately measuring collocation power usage (although the record shows that the extent of the error varies significantly from collocation to collocation, and can be either positive or negative), and AT&T's return-side system is probably not salvageable as presently configured. As discussed throughout Joint CLECs' Initial Brief and this Reply Brief, we disagree with AT&T as to what the "replacement" should be.

III. AT&T's Self-Certification Proposal is Unreasonable and Should Be Rejected; AT&T Should Continue to Be Responsible for Measuring CLECs' Collocation Power Usage. (Response to Section III of AT&T's Initial Brief)

A. AT&T's Self-Certification Proposal is Unnecessary. (Response to Section III.A of AT&T's Initial Brief)

Section III.A of AT&T's Initial Brief (pages 16-21) is largely a description of AT&T's "per amp" [sic] proposal, which is really a self-certification proposal that would shift substantial costs and administrative burdens of measuring collocation power usage to the CLECs, and would increase the total resource costs of this activity. In Section III.A, AT&T appears to have accurately described its own self-certification proposal that it submitted in its surrebuttal testimony (Schedule RAS-14). Joint CLECs reiterate, however, that AT&T's self-certification proposal is unnecessary and need not even be evaluated by the Commission in deciding this case. AT&T should continue to be responsible for measuring collocation power usage using (at its choosing) one of the alternatives that has been presented in this case, such as the use of hand-held amp meters to take periodic readings.[71]

Joint CLECs do have a number of other observations concerning the discussion in Section III.A of AT&T's Initial Brief.

First, AT&T attempts to justify its proposed 5 amp minimum charge by arguing that "Without a 5 amp minimum, AT&T Illinois would be incurring costs to provide the CLEC with the capability to draw DC power without recovering those costs."[72] However, AT&T's existing 28 cents per kWh rate includes **BEGIN PROPRIETARY** **END PROPRIETARY** for recovery of AT&T's out-of-pocket cost for electric power purchased from its electricity supplier, and the proposed $9.80 per amp per month rate, which in this regard is a mathematical conversion from the per-kWh rate, will include the same component to recover AT&T's out-of-pocket electric supply acquisition costs.[73] Therefore, a significant portion of AT&T's proposed minimum charge in fact would be compensation for electric power acquisition costs that AT&T does not incur where the CLEC draws no (or less than 5 amps) power. Joint CLECs submit that AT&T could have submitted an alternative rate design for a minimum charge that would not have recovered non-existent electric power supply acquisition costs, but rather only the costs of the portion of the central office power supply infrastructure that is used to provide collocation power capacity to CLECs. However, AT&T failed to do so. AT&T's proposed 5 amp/51 amp minimum charges in this case violate the Commission's directive in the

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[71] Joint CLECs' positions on specific language issues with respect to RAS-14 are discussed in detail in Sections III.B and IV of our Initial Brief and Section IV of this Reply Brief, although we reiterate that the Commission can decide this case without having to evaluate and resolve those issues.

[72] AT&T Initial Brief at 17. AT&T's proposed minimum charge is 51 amps for power delivery arrangements served directly from the main power board of the wire center. *Id*.

[73] AT&T Ex. 2.0, Sch. SAB-1; Tr. 596-97.

Illinois 1998 Order to charge CLECs for collocation power on the basis of usage, and are not just and reasonable. Staff and Joint CLECs recommend that AT&T's proposed 5 amp/51 amp minimum charge should be rejected.[74]

Second, AT&T asserts that "no one disagrees with the concept of an audit."[75] However, since Joint CLECs' position is that there is no need for a self-certification process, Joint CLECs disagree with the need for any audit. An audit process is unnecessary if AT&T remains responsible for measuring CLECs' collocation power usage, whether by using hand-held meters to take periodic readings or by using a fixed metering system.[76] Joint CLECs also dispute the need for unlimited audits as proposed by AT&T.

Third, AT&T points to the fact that in developing the proposed per-amp usage rate of $9.80 per amp per month, it used the shared and common cost factor approved by the Commission in Docket 02-0864 (AT&T's UNE loop rate increase case) rather than the higher shared and common cost factor used in the development of the 28 cents per kWh rate that was approved in Docket 98-0396.[77] It is appropriate to use the more current shared and common cost factor that was developed and approved in Docket 02-0864, since this shared and common cost factor more accurately represents AT&T's current costs.

Fourth, AT&T states that "additional CLEC savings will result" from AT&T's proposed elimination of the non-recurring charges for Power Measurement and Power Measurement

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74 Staff Initial Brief at 16-18.

75 AT&T Initial Brief at 18.

76 Assuming that a self-certification process were to be adopted, which Joint CLECs believe should not occur, Joint CLECs' specific concerns with AT&T's proposed audit process are discussed in Section IV.B of our Initial Brief and Sections IV.10 – IV.13 of this Reply Brief.

77 AT&T Initial Brief at 19.

Engineering.[78] However, these "savings" will likely prove illusory for most CLECs that have already paid substantial amounts to AT&T for installation of its flawed return-side power metering system.[79] While some new collocations may be installed by CLECs in AT&T central offices in the future, the prospective "savings" from not having to pay the Power Measurement and Power Measurement Engineering nonrecurring charges for power delivery arrangements for new collocations will likely pale in comparison to the amounts of these nonrecurring charges that AT&T has already collected from CLECs, and which AT&T is not proposing to refund if it is allowed to abandon its return-side power metering system.[80] Moreover, under AT&T's self-certification proposal, CLECs would have to bear substantial new costs in the future to take physical readings of their collocation power usage and report the results to AT&T, and to respond to AT&T's audits.

Fifth, AT&T asserts that "the beauty" of its self-certification proposal is that it works with the existing physical infrastructure for DC power; can be put into effect quickly without requiring CLECs to make changes in their collocation arrangements; does not require the installation of any new equipment or any new investment; and does not require that power cables be broken to install shunt bars.[81] However, all of these things are also true under a system in which AT&T remains responsible to measure CLECs' collocation power usage and carries out this responsibility using hand-held amp meters. In fact, if AT&T remains responsible for measuring

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78 *Id*. at 20. The Power Measurement nonrecurring charge of $2,911.85 per arrangement recovers the costs to purchase and install PMUs, while the Power Measurement Engineering Charge of $272.47 per arrangement recovers the cost to install shunts and associated wiring in AT&T's return-side power metering system. *Id*.

79 Four of the Joint CLECs have already paid a total of approximately $1,519,000 in nonrecurring charges to AT&T for the power metering arrangements that AT&T is now proposing to abandon. *See* Jt. CLEC Initial Brief at 12-13 and 31-32.

80 AT&T Initial Brief at 14.

81 *Id*. at 21.

usage with hand-held meters, AT&T should be able to begin taking measurements immediately (particularly given the fact that a significant number of AT&T's central offices are manned), whereas CLECs believe they will need 180 days to make the initial readings due to limited and constrained resources and AT&T has agreed to allow them to take 90 days to perform that task.

B. AT&T's "Relevant Policy Objectives" Are Fully Satisfied If AT&T Measures Collocation Power Usage Using Hand-Held Meters. (Response to Section III.B of AT&T's Initial Brief)

AT&T claims that its self-certification proposal satisfies "the relevant policy objectives" and therefore "is the best replacement for the current return-side power metering system."[82] However, there is no independent source for AT&T's "relevant policy objectives"; rather, they are simply a set of criteria that AT&T itself developed with the objective of showing that its proposal can meet them. Thus, AT&T's conclusion that its self-certification proposal satisfies the "relevant policy objectives" is a self-fulfilling prophecy.

But even if one were to accept these objectives, AT&T's "relevant policy objectives" are all satisfied by a solution in which AT&T continues to be responsible to measure CLECs' collocation power usage, using hand-held meters. In fact, judged under AT&T's policy objectives, a hand-held metering solution is a superior solution to AT&T's self-certification proposal for replacing the existing return-side metering system.

Below we discuss each of AT&T's "relevant policy objectives."

- The system should produce accurate charges so that CLECs are not underbilled or overbilled for DC power.[83]

[82] *Id.* at 22-25.

[83] *Id*. at 22.

An approach in which AT&T continues to be responsible for measuring CLECs' collocation power usage by taking periodic readings with hand-held meters will produce accurate charges. All parties agree that hand-held meters are sufficiently accurate (and easy to use) to take readings of the CLECs' collocation power usage for billing purposes.[84] In fact, under its self-certification proposal, hand-held meters are what AT&T expects CLECs to use to take physical readings of their collocation power usage, and are what AT&T intends to use to conduct audits of CLECs' collocation power usage.[85]

- There should be a close correlation between the DC power that a CLEC needs to meet its collocation power requirements and the power charges that the CLEC incurs, *i.e.*, the system should be usage based.[86]

AT&T can bill each CLEC for the collocation power it actually uses by taking periodic readings using hand-held meters. Again, under its own self-certification proposal, hand-held meters are what AT&T expects CLECs to use to take physical readings of their usage and what AT&T intends to use to conduct its audits of the CLECs' collocation power usage. The parties agree that modern digital communications equipment uses DC power at a fairly constant rate 24 hours per day, seven days per week,[87] so if AT&T takes periodic readings of the CLEC's collocation power usage (in amps) with hand-held meters, this will provide sufficient information to bill the CLEC for its actual usage of DC power.[88]

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84 *See* Jt. CLEC Initial Brief at 20; AT&T Ex. 3.1 at 20; Staff Initial Brief at 11.

85 McLeodUSA Ex. 107 (AT&T Response to QCC Data Request 3.13); Tr. 335-36.

86 AT&T Initial Brief at 22.

87 Jt. CLEC Ex. 2.1 at 29-30; AT&T Ex. 3.1 at 27-28; AT&T Ex. 5.1 at 36.

88 If AT&T measures the collocation power usage by taking periodic readings with hand-held meters, Joint CLECs would not oppose a requirement that CLECs provide timely notification to AT&T if they add or remove equipment from a collocation space such that the DC power usage at that collocation may be affected (up or down). This would enable AT&T to determine if it wanted to advance the date on which it next takes a reading of the CLEC's DC power usage at that collocation.

- The system should be cost-effective and should enable the job to be done by existing infrastructure with no extra costs.[89]

If AT&T measures CLECs' collocation power usage with hand-held meters, the only extra cost that will be incurred will be the nominal cost for AT&T to purchase a sufficient inventory of hand-held metering units (assuming it does not have these already).[90] No modifications, enhancements or repairs to AT&T's existing in-place return-side metering system will be needed because that system will essentially be abandoned (just as it would under AT&T's self-certification proposal). A system in which AT&T measures CLECs' collocation power usage for billing purposes by taking readings with hand-held meters will be less costly than would AT&T's self-certification proposal. This is because AT&T's self-certification proposal would necessitate a duplicative system in which both CLECs (at least two times per year) and AT&T (in its audits, which AT&T wants to be able to conduct an unlimited number of times per year) would be taking physical readings of power usage at the CLECs' collocations. Further, CLECs would have to develop internal systems and procedures to take periodic physical readings of their collocation power usage and to report the results to AT&T, and to review and respond to AT&T's audit results – costs that the CLECs do not incur today.[91]

In short, AT&T's self-certification proposal would increase the total resource costs to the industry of measuring and billing for collocation power. A solution in which AT&T continues to

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89 AT&T Initial Brief at 23-24.

90 Hand-held metering devices cost from $100 to $300 apiece. Staff Initial Brief at 12; Tr. 268.

91 AT&T claims that its self-certification proposal will be cost-effective and easy to administer because each CLEC can reasonably be expected to have a technician at each of its collocation sites at least two times per year for other purposes. AT&T Initial Brief at 24. However, it would clearly be more cost effective in terms of total resource costs for *one* AT&T technician to travel to a central office two times per year (assuming that AT&T does not already have technicians assigned to the site on a daily basis, which is likely the case for most AT&T central offices) to take physical readings of collocation power usage for *each* CLEC collocation at that office, than for technicians for four, six, ten, or however many different CLECs are collocated at the central office, each to travel to the central office two times per year to take readings of their respective companies' power usage.

measure and bill for collocation power usage by taking periodic readings with hand-held meters is more cost-effective than implementation of AT&T's self-certification proposal. Additionally, this solution is cost-effective from the CLECs' perspective in that they would continue to receive what they have already paid AT&T for through substantial nonrecurring charges – a functioning power measurement system that requires no involvement on the CLECs' part.

- The system should be relatively easy to administer and should not require a host of ancillary equipment.[92]

A system in which AT&T continues to measure and bill for CLECs' collocation power usage by taking periodic readings with hand-held meters will be easy to administer and will not require a host of ancillary equipment – only a sufficient inventory of hand-held metering units. Further, such a system will be easier to administer than AT&T's self-certification proposal, which would require CLECs to submit and AT&T to receive and process the CLECs' periodic self-certifications.[93] AT&T's self-certification proposal would also require the parties to administer the audit process. These new administrative processes will not be required if AT&T continues to be responsible for measuring CLECs' collocation power usage for billing purposes, as it is today, but does the job by taking periodic readings with hand-held amp meters.

- The system should be capable of being implemented without changes to physical plant and without causing undue disruption to CLEC operations.[94]

A system in which AT&T continues to measure and bill for CLECs' collocation power usage by taking periodic readings with hand-held meters will not require any changes to existing physical plant, and will cause no disruption to CLEC operations. From the CLECs' perspective,

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92 AT&T Initial Brief at 24.

93 CLECs' long experience with AT&T's ordering systems causes them to approach with trepidation any new process that requires a CLEC to submit information to AT&T and AT&T to process it accurately and correctly.

94 AT&T Initial Brief at 24-25.

implementation of such a solution will be a transparent change from the current situation – AT&T will continue to be responsible for measuring the CLECs' collocation power usage and submitting bills to them, and CLECs will receive and pay their collocation power bills. In contrast, implementation of AT&T's self-certification proposal would involve disruption to current CLEC operations because the CLECs would have to develop internal systems and procedures for taking periodic, physical readings of their collocation power usage and reporting the results to AT&T, and for reviewing and responding to AT&T's audit results.

For all these reasons, and contrary to AT&T's assertion,[95] AT&T's self-certification proposal is *not* the best replacement for the current return-side power metering system. Based on AT&T's own "relevant policy objectives", AT&T's self-certification proposal is an inferior alternative to a solution in which AT&T continues to measure and bill for CLECs' collocation power usage by taking periodic readings with hand-held meters.

C. Other States' Actions Regarding Collocation Power Provide No Support for AT&T's Proposal to Shift the Costs and Burdens of Measuring Collocation Power Usage to CLECs. (Response to Section III.C of AT&T's Initial Brief)

AT&T's discussion of other states' regulatory actions related to collocation power provides no support its proposal that this Commission approve a self-certification and audit process that will shift to the CLECs the costs and administrative burdens of measuring their collocation power usage for billing purposes. Even with all of the regulatory actions involving collocation power across the nation over the past four to five years, there is not a single case that deals with the same situation faced, or being proposed by AT&T, in Illinois. In other words, as

[95] AT&T Initial Brief at 25.

posed by Judge Gilbert, there are no "apple-to-apple" comparisons to be made with respect to other state proceedings.

Unlike any other state at that time, in 1998, when this Commission was faced with identifying the proper method of charging CLECs for collocation power consumption, this Commission found that CLECs should be billed on the amount of power used and then, proceeded to allow AT&T to implement a methodology that would implement the Commission's finding. In other words, this Commission "got it right" initially, long before other states started recognizing the importance of the issue.[96] That decision was an important landmark in the area of collocation power pricing as no other commission had reached that conclusion.[97] In 2000, AT&T implemented its own methodology to implement the Illinois 1998 Order by using the return side shunt power metering architecture. After four years of knowing that the return side power metering architecture resulted in inaccurate measurements, AT&T has now proposed (in its rebuttal testimony) wholesale changes to its collocation tariff that would shift the cost and burden to CLECs to measure and to report their own power usage and subject them to unlimited audits and penalties.

No other state proceeding identified by AT&T involves the same situation, and no other state has ordered CLECs to measure their own collocation power usage by taking mandatory, periodic physical readings as AT&T is proposing here. Joint CLECs urge the Commission to maintain its determination that CLECs should be charged for collocation power based on actual

96 Jt. CLEC Ex. 2.0 at 23.

97 Joint CLECs submit that one of the reasons that AT&T is fighting so vigorously in this proceeding to have the Commission's "blessing" to abandon the power metering structure and to move to a system that would place the responsibility for measurement and reporting on the CLECs is to be able to advise other states that this Commission no longer supports power metering as a reasonable method of measuring power in their efforts in other states. This Commission should stand by its original determination and hold AT&T, not the CLECs, accountable to remedy the problem, rather than give AT&T permission to shift the costs and burdens of measuring collocation power usage to CLECs.

power used and allow AT&T to determine on its own the best mechanism to correct the problems associated with the power metering architecture.

Generally speaking, the regulatory proceedings discussed by AT&T fall into two categories: (1) the CLECs sought a change from the ILEC's "fused amp" (or load amp) pricing structure for collocation power and the ILEC objected – thereby causing an investigation, arbitration, or complaint proceeding[98]; or (2) through negotiations, the ILECs agreed to reduce collocation power charges while still charging CLECs based on fused amps by eliminating charges for both the A and B feeds of a DC Power Delivery Arrangement (referred to as redundant power).[99] In each of the state regulatory proceedings listed by AT&T in the first category, without exception, the state commission was faced with disputes at the initial stage of considering how to properly measure and to bill CLECs for collocation power. Not one of these other regulatory agencies was faced with the situation that this Commission now faces – none of those other commissions were asked to move away from an already-implemented method of measuring and billing for power based on actual usage, in which the ILEC was responsible for the measurement and billing; nor were any of these Commissions asked to require CLECs to abandon millions of dollars invested in non-recurring charges associated with the power metering method implemented by the ILEC, and instead, to bear the full operational and

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[98] The regulatory proceedings related to this type of proceeding included Michigan, Missouri, Tennessee, Florida, and Kansas. *See*. AT&T Initial Brief at 27. Also included in this category are the regulatory proceedings in Texas and Georgia as the issue in those proceeding involved a further dispute as to the proper method to implement usage based power metering or measurement in which the ILEC (AT&T in the case of Texas) refused to implement the state commission order. *Id.* at 29-30. Joint CLECs note that at page 30 of its Initial Brief, AT&T states that "[t]he Texas Commission mistakenly believed that power metering was a viable way to implement usage-based charging . . . ." Joint CLECs hope that AT&T displays greater respect than this in describing this Commission's decisions in its briefs at other commissions.

[99] The regulatory proceedings that adopted negotiated provisions to reduce the amount that the CLECs are charged on a per fused amp basis include Indiana, Ohio, North Carolina, South Carolina, and California. *See* AT&T Initial Brief at 25-27.

administrative burden of measuring actual power semi-annually and to be subject to unlimited audits. Try as it might, AT&T cannot suggest and does not directly suggest that any of the state proceedings are dispositive or even relevant to the particular issues faced by this Commission because, in fact, they are not.

It is true that in some states, CLECs are still being billed on a "per fuse" amp basis in which the CLEC pays for DC Power consumption based on the size of the DC Power Delivery arrangement ordered (*e.g.*, 20, 40, 50, 100 amps). In those states, the CLEC is not billed based on any measurement of actual usage of collocation power. AT&T is not proposing this process, and, consequently, these state decisions are irrelevant. The trend that can be seen in many of these states is for the ILEC to at least reduce the amount that it charges the CLEC by eliminating the charges for the redundant power feeds (also referenced as the 50% available power), even though the charges remain on a per fused amp basis. In Indiana and Ohio, for example, AT&T was required to stop charging for redundant power as a condition to obtaining Section 271 Relief.[100]

The other state regulatory proceedings cited by AT&T likewise provide no support for its position because in those cases, the state regulatory proceedings dealt with or are dealing with the threshold issue that this Commission dealt with in 1998 – whether CLECs should be billed based on actual power used and, if so, what is the appropriate rate structure upon which to bill the CLECs. Joint CLECs acknowledge that the state regulatory commission decisions vary as to the outcomes reached, but point out that the trend for state commissions' decisions in this area is

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[100] *See*, *e.g.*, AT&T Initial Brief at 25, *citing In the Matter of Joint Application by SBC Communications Inc., Illinois Bell Telephone Company, Indiana Bell Telephone Company Incorporated, the Ohio Bell Telephone Company, Wisconsin Bell, Inc., and Southwestern Bell Communications Services, Inc. for Authorization to Provide In-Region, InterLATA Services in Illinois, Indiana, Ohio, and Wisconsin*, Memorandum Opinion and Order, WC Docket No. 03-167 at 25, 29-30 (October 15, 2003)

for CLECs to be charged for actual power used. This particular issue is not in dispute in this case. Moreover, that trend is not dispositive of whether this Commission should move away from a strictly usage-based rate structure (*e.g.*, to allow AT&T to charge a minimum amp charge) in which AT&T is responsible for the measurement and billing for actual power used, to the complex system now proposed by AT&T that would place the administrative and operational burdens on the CLECs to measure and to report their actual power usage.

AT&T did not and cannot cite to a single state decision in which a commission has been asked to consider, much less actually approve, a request to abandon millions of dollars in investment and non-recurring charges where power metering was already implemented, and to shift the burden to the CLECs to physically measure and to report their power two times per year (plus an abbreviated time frame to provide the initial report); to respond to unlimited audits on reported power usage; and to be subject potentially to payment of the ILEC's audit costs. The Verizon Settlement Agreement is perhaps the closest *negotiated* agreement (*i.e.*, it was not ordered by the New York Commission) to such a scenario, but in that case, the end result reached in the Settlement Agreement had not been originally proposed by any party (including Verizon) in the proceeding.[101] Moreover, as Joint CLEC witness Steve Turner explained, the settlement agreement involved a very simple process in which Verizon agreed that CLECs could simply report one time per year with *no* requirement for physical site inspections or measurement.[102] Again, however, in sharp contrast to this case, New York CLECs had not already invested money into a power metering system designed by the ILEC and the ILEC had

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[101] *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations Relating to the Provisioning of Direct Current Power by Verizon New York, Inc for Use in Connection with Collocation Spaces*, New York Public Service Commission, Case No. 03-C-0980, Att. A (Agreement and Settlement) at 2 (phase I addressed parties' power metering proposals, rate structures and proposals)(April 14, 2004).

[102] Jt. CLEC Ex. 2.2 at 18.

not implemented an in-place measuring system, only to seek regulatory approval to abandon that system and to shift the responsibility for measuring usage to the CLECs, as AT&T now asks this Commission to do.

In summary, none of the decisions from other states cited by AT&T support AT&T's proposal to shift the costs and administrative burdens to CLECs and to require CLECs to take periodic physical usage measurements of their own DC power usage and send the results to AT&T to use for billing purposes.

D. AT&T's Per Amp Proposal Will Increase Power Costs and Is Not Consistent with Commission Precedent. (Response to Section III.D of AT&T's Initial Brief)

Joint CLECs are not disputing the mathematical conversion of a per kWH rate to a per amp rate.[103] However, as Joint CLECs established in evidence and addressed in their Initial Brief, the mathematical conversion is largely immaterial as to whether AT&T's revised tariff proposal should be adopted.[104] Therefore, Joint CLECs will not address AT&T's explanation of its mathematical conversion to a per amp rate.[105]

The basic dispute on this aspect of AT&T's revised tariff proposal is that AT&T wants to impose a minimum amp charge (5 amps if the power is served off of the BDFB and 51 amps if the power is served off of the power board) that CLECs will have to pay regardless of whether their collocation equipment is actually drawing that amount of power. Even the modifications to AT&T's proposal in RAS-14 do not diminish the facts that: (a) charging CLECs a minimum amperage is not consistent with the 1998 Illinois Order that CLECs should be billed for power

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103 *See* Joint CLECs Initial Brief at 48.

104 *Id.*

105 *See* AT&T Initial Brief at 31-32.

actually used; and (b) the minimum amperage charge will result in inflated collocation power costs even if a CLEC is not drawing power in certain collocation arrangements. Each of these points was addressed by Joint CLECs and will not be repeated here.[106] AT&T's analysis on this issue is also found in its discussion of the revised tariff proposal in Sections IV. 7 and 8, and Joint CLECs will also address the substance of AT&T's arguments in those sections of this Reply Brief.

AT&T now attempts to couch its revised minimum amp charge (in RAS-14) as a compromise designed to be "net neutral" to collocators that ordered power correctly initially.[107] Regardless of the level of financial impact, the fact remains that the end result of AT&T's revised proposal, with or without the minimum amp charge, will be to increase CLECs' collocation power costs. Joint CLECs accept that they should pay for the amount of power they actually consume; what Joint CLECs cannot agree with and this Commission should not condone, is that CLECs should be required to pay for power that the CLEC is not using or consuming (and that AT&T is not incurring costs to acquire from electricity suppliers). AT&T's proposed minimum amperage charge, however, would require the CLECs to do just that. Such an outcome is not consistent with the Illinois 1998 Order or with sound policy considerations.

1. The Minimum Amp Charge Will Increase CLECs' Power Costs. (Response to Section III.D.1 of AT&T's Initial Brief)

Joint CLECs established that as a matter of sound engineering and planning practices, CLECs design and order collocation space and power based on anticipated needs, recognizing the collocation space can be used for a variety of equipment that use various amounts of

[106] *See* Joint CLECs Initial Brief at 44-48.

[107] AT&T Initial Brief at 32.

power.[108] It is not uncommon for a CLEC to have more than one bay of collocation space, each designed to have more than one DC Power Delivery Arrangement, based on the type of equipment to be placed in each bay. The reason for this should be plain – given the high cost of collocation, particularly with respect to the initial non-recurring charges and investment, a CLEC will seek to obtain the collocation space and power it requires for current and near term future use. However, it cannot be said that AT&T goes uncompensated after the collocation space is constructed and the DC Power Delivery arrangement has been turned over to the CLEC. As Mr. Turner explained, under existing interconnection agreements and tariffs, CLECs pay AT&T a monthly recurring charge for the entire space that the CLEC occupies, regardless of whether the CLEC has fully used or utilized the collocation space.[109] In addition, the CLEC paid large non-recurring charges for the establishment of each of its collocation arrangements, representing significant payments to AT&T. As to the costs associated with the DC Power Delivery arrangement, the CLEC pays nonrecurring charges associated with the cabling and infrastructure that supports the DC Power arrangement.[110] Therefore, from an economic perspective, CLECs compensate AT&T for use of the space and cabling costs associated with each and every collocation arrangement, regardless of its level of utilization.

Because of the manner that many CLECs designed and ordered collocation power, however, there are certain DC Power Delivery Arrangements which have been paid for via non-recurring charges for which a CLEC may be drawing less than 5 or 51 amps (again, based on where the power is provided from – at the BDFB or the main power board). There is a factual dispute about whether certain types of equipment draw more or less than 5 or 51 amps, and Joint

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108 Jt. CLEC Ex. 2.2 at 5.

109 Jt. CLEC Ex. 2.2 at 7.

110 *Id*. at 8.

CLECs submit that the credible evidence on this point was presented by Mr. Turner given that he is an electrical engineer with vast first hand experience in the design and installation of collocation power equipment, who also made personal inspections of collocation arrangements and identified certain types of equipment that draw less than 5 amps.[111] In sharp contrast, and a contrast that must be considered in determining the credibility of the witnesses, AT&T's case rests on testimony provided by Mr. Nevels who is not an engineer and has never had any operational experience in any aspect of collocation and has not been responsible for any design or installation of collocation power arrangements.[112] The record shows that there are certain types of equipment that may be used by a CLEC that draw less than five or 51 amps, such as certain multiplexing equipment, certain DSL applications, and alarm equipment.[113] If a CLEC uses that equipment and is drawing power from a single DC Power Delivery Arrangement for that piece of equipment located in a single bay, then AT&T's proposed minimum amperage charge will require the CLEC to pay for power that is not actually consumed.

AT&T also attempts to distract attention from the basic concerns raised by CLECs about the significance of the financial impact of AT&T's proposal, by claiming that some CLECs' calculations are inaccurate. But while there may be debate on the level of the impact, which will be discussed below in Section III.D.2, AT&T cannot and does not contend that there will be no impact to a collocator's cost. Moreover, it cannot and does not contend that its minimum amp

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[111] Jt. CLEC Ex. 2.0 at 2-3; Jt. CLEC Ex. 2.2 at 9.

[112] McLeodUSA Ex. 105 (AT&T Responses to Jt. CLECs Data Requests 2.26, 2.27, 2.28, 2.29, Mr. Nevels admits that his role in "network regulatory would be to look at this offering and make sure that it was in line with the FCC and the rules of this state and other states." Tr. 313. Mr. Nevels further admits that he does not have any experience as an electrical engineer or personal knowledge of working with collocation equipment and return side shunt architecture. *Id.* at 326-27. Mr. Nevels' lack of real experience with collocation space and power arrangements is particularly important given that AT&T's basic case, as presented for the first time in surrebuttal, is based on recitations of "facts" from Mr. Nevels who has no experience in the field.

[113] Jt.CLEC Ex. 2.2 at 9.

charge is consistent with this Commission's directive that CLECs should be billed for power actually used. In fact, some CLECs' will increase solely on the basis of the minimum amperage requirement. For example, AT&T does not dispute that Covad will experience at least an increase of 13.73% in its collocation costs attributable solely to the minimum amperage charge.[114] This amount may not be significant to AT&T, but it is certainly significant to Covad and other similarly situated CLECs. Moreover, every dollar the minimum amp provision requires CLECs to pay for unused power is a dollar AT&T has not earned. Thus, AT&T will receive a windfall because its revenues from its collocation power supply charges will exceed its costs.

Accordingly, the Commission should reject AT&T's proposed minimum amperage charge; it will unnecessarily and unfairly increase CLECs' collocation power costs without reflecting the amount of power actually consumed.

2. Estimated Bill Increases to CLECs Resulting from AT&T's Proposal in this Case. (Response to Section III.D.2 of AT&T's Initial Brief)

In Section III.D.2 of its Initial Brief, AT&T discusses estimates of the bill impacts of its proposal in this case on Qwest Communications Corporation ("QCC") and McLeodUSA that were presented by witnesses for these two companies, and alternative calculations that were provided in rebuttal by AT&T witness Mr. Smith. Joint CLECs are not in a position to address the bill calculations presented by QCC witness Ms. Hunnicutt-Bishara or the alternative calculations presented by AT&T witness Smith. With respect to the bill impact to McLeodUSA, Joint CLECs note that AT&T's assertions that "McLeodUSA presented no rebuttal" to AT&T

[114] Jt. CLEC Ex. 2.2 at 6.

witness Smith's "recalculation" of the bill impact of AT&T's proposal on McLeodUSA.[115] AT&T ignores that under the procedural schedule for this case, McLeodUSA was not *allowed* to present rebuttal to Mr. Smith's "recalculation". Mr. Smith's "recalculation" was contained in AT&T's rebuttal testimony,[116] and under the procedural schedule for this case, CLECs were not allowed to file further testimony in response to AT&T's rebuttal testimony.[117] Therefore, AT&T's comment is inappropriate and misleading.

AT&T criticizes the bill impact calculation presented by McLeodUSA witness Ms. Spocogee in her testimony,[118] on the grounds that she based her calculations on the load amps that McLeodUSA would expect to order at each collocation site rather than the actual usage in amperes that McLeodUSA would expect to have at each collocation site.[119] However, the record shows that Ms. Spocogee's calculations were based on directions given to her by AT&T representatives as to how the mechanics of AT&T's proposal in this case would work. As Ms. Spocogee explained:

> [W]hen we met with SBC – or excuse me, AT&T to go through the product and what they were proposing, what they had stated was that the billing would be $9.80 per amp but it would not be based on the usage that were – the actual usage or the consumed power. It was actually based on the ordered amount of the amps that we would have to be required to have.[120]

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115 AT&T Initial Brief at 40.

116 AT&T Ex. 5.1.

117 *See* Tr. 10 (Nov. 15, 2005). CLECs were later granted leave to file limited scope surrebuttal testimony in response to a portion of AT&T's rebuttal, but the scope of the surrebuttal was limited to responding to pages 7-13 and Schedule RAS-4 of Mr. Smith's rebuttal, which did not include his "recalculation" of the bill impact of AT&T's proposal on McLeodUSA. *See* Tr. 52-53 (Mar. 17, 2006).

118 McLeodUSA Ex. 1.0.

119 AT&T Initial Brief at 38-39.

120 Tr. 576-577.

AT&T has failed to explain why its field representatives would give a different explanation to McLeodUSA of how AT&T's billing proposal would work than the explanation provided by AT&T witness Smith in this proceeding. However, what AT&T's criticisms and Ms. Spocogee's testimony really highlight is how drastically different the proposal AT&T presented in its rebuttal and surrebuttal testimony is from the proposal embodied in the tariffs AT&T filed to initiate this proceeding.

Moreover, AT&T witness Smith's dispute with McLeodUSA's calculations are not as well-founded as AT&T attempts to portray in its Initial Brief. For example, AT&T points to a discrepancy between the "Estimated Load Amps" used by Ms. Spocogee for certain wire centers and the "actual field measurement" in amps provided by McLeodUSA for those wire centers.[121] However, as shown by Mr. Smith's Schedule RAS-11, in the worksheet provided by McLeodUSA in discovery that is referred to at page 39 of AT&T's Initial Brief, McLeodUSA had "actual field measurements" for only 32 of its 143 collocations.[122] Further, the "Estimated Load Amps" used by Ms. Spocogee in her calculation for each McLeodUSA collocation (shown on Schedule RAS-10) are considerably less than McLeodUSA's "Amps Ordered" for each collocation (shown on Schedule RAS-11).[123] Thus, as Ms. Spocogee explained, McLeodUSA's

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121 AT&T Initial Brief at 38-39.

122 AT&T states at page 39 of its Initial Brief that "a similar disparity exists for every central office for which McLeodUSA provides an actual field measurement reading", but AT&T neglects to mention that McLeodUSA had such readings for only 32 of its 143 collocations.

123 For example, for wire center/collocation ALTNILAKH07, **BEGIN PROPRIETARY** **END PROPRIETARY** Similarly, for wire center/collocation ARLHILAHH16, **BEGIN PROPRIETARY** **END PROPRIETARY**

bill impact calculation reflected an effort to reduce the amperage that would be used for DC power billing purposes from the level of amperage that has previously been ordered.[124]

Further, if the rest of AT&T's case is to be believed, AT&T witness Smith's "recalculation" of the bill impact of AT&T's proposal on McLeodUSA is inaccurate and understated. As described at pages 39-40 of AT&T's Initial Brief, Mr. Smith (1) started with the average monthly dollar amount billed by AT&T to McLeodUSA for collocation power usage, (2) divided that dollar amount by 28 cents per kWh to derive a number of kWh of actual average monthly usage by McLeodUSA at its collocations, (3) divided the average monthly number of kWh by a kWh-to-amps conversion factor to get an equivalent average number of amps used per month, and (4) billed out the average monthly amps at the proposed $9.80 per amp per month rate. However, Mr. Smith's calculation assumes that AT&T's return-side power metering system currently is accurately measuring McLeodUSA's actual kWh usage at each of its 143 collocations, which according to AT&T is not the case.[125]

As Ms. Spocogee pointed out, if AT&T's claimed average underbilling due to leakage of 38% is applied to AT&T's current average monthly billings to McLeodUSA for collocation power, McLeodUSA would experience a monthly increase in collocation power costs of $10,538,[126] which is in excess of $125,000 per year.[127] This may be an insignificant amount to a company the size of AT&T, but to McLeodUSA it is a significant cost increase to absorb in a single state.

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124 Tr. 578-79.

125 *Id.* at 131.

126 McLeodUSA Ex. 1.0 at 5.

127 This calculation does not take into account any additional impacts on AT&T's billings to McLeodUSA for collocation power of AT&T's proposed 5 amp/51 amp minimum monthly charges. Tr. 580-81.

Joint CLECs understand and agree that their actual collocation power usage should be accurately measured and billed. However, the magnitude of bill increases that CLECs may face, just as a result of moving from AT&T's current return-side power metering system to a solution that accurately measures their DC power usage, is further reason not to impose on CLECs the *additional* costs of measuring and reporting their own usage that would be shifted to them by AT&T's self-certification proposal.

IV. In The Event That The Commission Decides to Consider A Self-Certification Methodology, Joint CLECs' Proposals Rather than AT&T's Proposals Should Be Adopted. (Response to Section IV of AT&T's Initial Brief)

Joint CLECs do not agree with AT&T's characterization of their position on the merits of AT&T's self-certification and audit proposal. As shown above, it is not necessary to adopt AT&T's proposal in order to correct the problems caused by AT&T's choice of a return side shunt metering system. Thus, AT&T is seriously misrepresenting Joint CLECs' position when it states that Joint CLECs' "real dispute is with how [the self certification and audit proposal] should be implemented, not whether it should be implemented at all".[128] On the contrary, as stated by Joint CLECs in our Initial Brief, the self-certification and audit process is a "third-best" solution to the problems created by AT&T's power metering system.[129] As stated earlier in this Reply Brief, the Commission can decide this case and solve the problems created by AT&T's return-side power metering system without even considering AT&T's self-certification proposal. Therefore, the Commission needs to address the merits of AT&T's self-certification and audit

[128] AT&T Initial Brief at 41.

[129] Jt. CLEC Initial Brief at 41.

proposal only if the Commission it rejects all of the other mechanisms presented in the record by Joint CLECs to measure collocation power consumption.

Should the Commission even reach the disputed issues concerning implementation of AT&T's self-certification and audit proposal, Joint CLECs are confident that when the Commission reviews the parties' competing positions, it will agree with Joint CLECs that the set of self-certification and audit rules proposed by AT&T would create an inefficient and cumbersome process that would unnecessarily raise the costs of collocation. Adoption of the Joint CLECs' revisions to AT&T's proposal would, as noted above, be a third best solution - but it would be far better than AT&T's proposal.

If the Commission decides that AT&T should be allowed to charge for amps used rather than kWh used (a change that Joint CLECs do not oppose), it should direct AT&T to take the readings of CLECs' usage at whatever time intervals AT&T feels is necessary. Requiring AT&T to conduct the readings would be fair and would render irrelevant the entire debate over certifications and audits. If the Commission, however, decides that CLECs should be responsible for certifying their usage, then the Commission should direct AT&T to institute a system that has minimal disruption on the operations of CLECs. Most importantly, that system should require no, or minimal, physical readings by CLECs and, if readings are required, the CLECs should be allowed maximum flexibility to take those readings.

Before turning to specifics, Joint CLECs need to respond to several other inaccuracies on page 41 of AT&T's Initial Brief. First, AT&T claims that Staff has supported AT&T's "per amp" proposal throughout this proceeding. What the Staff testimony cited by AT&T shows, however, is that Staff has unremarkably supported switching from a per-kWh to a per-amp method of billing, so long as CLECs continue to be billed only for actual power consumed. Staff has *not* supported AT&T's proposal for self-certification and audits. Second, AT&T implies that Joint CLECs support this proposal by stating that Joint CLECs devoted "much of their testimony" to its mechanics, and cites Joint CLEC Exhibit 2.2 at 3-26. AT&T, however, fails to mention that responding to the specifics of AT&T's newly-introduced self-certification proposal was the only topic Joint CLECs were permitted to address in Joint CLEC Exhibit 2.2 (Turner surrebuttal). Finally, AT&T asserts that its proposal "originated" with the proposed tariffs AT&T filed on September 15, 2005 to initiate this proceeding. In fact, however, as Joint CLECs have discussed throughout their briefs, RAS-14 is a completely different proposal from the original tariff filing in this case.

For convenience, Joint CLECs will address AT&T's arguments about its self-certification proposal using the same outline as AT&T's Initial Brief.

1. Language Dispute 1: Should The Initial Self-Certification For *Existing* Arrangements Be Completed Within 180 Days Or 90 Days

Section Reference: Paragraph 16A, First and Second Paragraphs

Before addressing the merits of 180 or 90 day initial certification periods, Joint CLECs must address one of AT&T's characterizations of their position. AT&T claims that the Joint CLECs "do not dispute that an actual physical measurement is prudent to make sure that AT&T Illinois' charges are accurate at the beginning of the "per amp" process."[130] On the contrary, Joint CLECs do not believe that they should ever be *required* to conduct their own physical measurements. Certainly, a CLEC may want to check AT&T's billings from time to time by making its own measurements and if there are differences, bringing them to the attention of AT&T. But such actions should be optional and conducted at a time and method that is most

[130] AT&T Initial Brief at 43.

efficient for the CLEC. Such a process is far different than the mandatory measurement proposed by AT&T.

The issue in this section, however, is whether mandatory CLEC initial measurements should be conducted within 90 or 180 days of the tariff effective date. AT&T's primary argument in support of its 90 day proposal is that it only takes five minutes to conduct a measurement.[131] While Joint CLECs agree that an experienced technician could measure a power supply in five minutes, it should be remembered that it would also be necessary to travel between collocation sites, which may exceed 100 locations.[132] AT&T acknowledges this, but then argues that it still leaves sufficient time for CLECs to measure all of their power supplies if an employee measures a few collocation sites per day.[133] But Joint CLECs do not believe that the Commission should be forcing upon them a system that requires CLECs to now divert technicians' time to conduct meter readings.[134] A far more efficient system would provide CLECs with sufficient time to conduct readings that could be made by existing employees in the course of their normal routine of traveling between collocation sites for repairs, modifications or regular equipment checks. The CLEC parties in this case have made it clear that giving them

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131 *Id.*

132 Jt. CLEC Ex. 2.2 at 15. McLeodUSA has 143 collocations at AT&T central offices in Illinois. McLeodUSA Ex. 1.0 at 2. AT&T attempts to minimize the extent of the travel time that McLeodUSA would incur in sending technicians throughout the State to take power usage readings at its collocations. AT&T Initial Brief at 43. The fact that "roughly 65%" of McLeodUSA's collocations are in "the Chicago area" (an outside-the-record calculation that AT&T has apparently made) still leaves some 50 collocations throughout the rest of the State. Further, AT&T has not described how it defined "the Chicago area", but inspection of Schedule RAS-11 shows that only 27 of the 143 collocations (19%) are in Chicago. The bottom line is that there is no way to minimize the time that would be required to send technicians twice per year to take power readings at 143 collocation sites that range from Waukegan and Rockford in the north to Quincy in the west to Champaign in the east and to Collinsville in the southwest. (*See* the list of collocations in AT&T Sch. RAS-11.)

133 *Id.*

134 Some CLECs may actually be required to hire and train new personnel to perform these tasks.

only 90 days does not provide them with that ability and would instead require them to hire new personnel or divert existing personnel from other tasks.

Given the fact that AT&T will be able to back bill for any increases in usage between currently billed levels and new levels after the initial meter reading, its financial loss should be minimal. In fact, AT&T was reduced in its Initial Brief to complaining that it would lose the time value of money and would be exposed to never recovering the difference if a CLEC goes bankrupt.[135] AT&T showed little interest in the time value of money when it waited four years to bring the issue of power leakage before the Commission. Waiting an additional three months to get what it assumes will be revenue increases is hardly a large imposition. Moreover, the assumption that there will be a revenue increase in the range of 50% is just that, an assumption. As noted in Joint CLECs' Initial Brief, the amount of leakage appears to be far less than AT&T claims.[136] In any event, if AT&T is truly interested in speeding up the receipt of revenues under its new per amp regime, it should simply read the meters itself.

2. Language Dispute 2: Should The Initial Self-Certification For *New* Arrangements Be Completed Within 90 Days Or 30 Days?

Section Reference: Paragraph 16A, First Paragraph

As explained in Joint CLECs' Initial Brief, AT&T's proposal that a CLEC makes its initial meter read within 30 days of the turnover of the collocation arrangement fails to recognize the realities of collocation installation and is inconsistent with the very terms of AT&T's tariff as to when a CLEC can occupy the newly constructed space. At the time that a new collocation arrangement is prepared, if the CLEC requested a new DC Power Delivery arrangement, the DC

135 AT&T Initial Brief at 44.

136 Jt. CLEC Initial Brief at 24-31.

Power Delivery arrangement is installed first and then, the space is turned over to the CLEC.[137] It is only after the space is turned over to the CLEC that the CLEC can consider installing the collocation equipment that will utilize this power.[138] Under the terms of AT&T's collocation tariff, a requesting carrier has up to 90 days to install collocation equipment.[139] It is only when the CLEC installs the collocation equipment and ramps it up that the collocation equipment would begin to draw power. Moreover, subsequent to the installation of the collocation telecommunications equipment, it must be tested and then, finally, circuits are activated. All of this activity, which will require scheduling of separate personnel and work steps, may take well beyond 30 days after the installation of the power arrangement. Thus, a meter reading made within 30 days of the turnover date of the collocation space may be far below the regular power draw once the equipment is fully operational.

Joint CLECs' proposed language mirrors the time provisions in AT&T's collocation tariff regarding when and how the collocation space becomes operational. Joint CLECs proposed to address this problem by committing to self-certify within the earlier of 90 days after installation of a new DC power delivery arrangement or 30 days after the CLEC knows that equipment has been turned up to utilize the DC power delivery arrangement. This is a fair proposal that provides AT&T with a more usable meter reading than the wildly inaccurate one it may get if made when equipment is still being tested and installed, or in the event that the equipment is not installed within 30 days of the space being turned over, then the "reading" would be nothing more than an educated guess (which AT&T contends that it cannot live with given that it is requiring CLECs generally to make physical meter reading two times per year for

137 AT&T Ex. 5.3.

138 Jt. CLEC Ex. 2.2 at 16-17.

139 *Id.*

all collocation arrangements). In addition, the CLEC proposed revisions create reasonable time frames without leaving the issue of self-reporting open-ended.

AT&T's first defense of its unreasonable position is to address an argument Joint CLECs never made – that they simply need more time to take measurements. Thus, AT&T complains that "this is not a situation where a CLEC must take physical measurements at 100 locations."[140] True. But that misses the point that the measurement taken within 30 days of turnover of the collocation space will be inaccurate.

AT&T's second argument is that "the Joint CLECs' proposal permits them to avoid any power charges for as long as 90 days."[141] Again, AT&T is missing the point. What good is a reading taken within 30 days, when equipment is still being installed and tested, if it is far below the amount of the actual operational usage or if the equipment is not even installed within the first 30 days? Plus, the Joint CLECs are proposing that the meter reading be within 30 days of the operation of the telecommunications equipment, so the delay in providing that reading and the "free" service will be minimal.

Demonstrating once again that AT&T's self-certification scheme is a moving target and each convoluted proposal generates more convoluted proposals to fix the old ones, AT&T adds a *new* requirement in its Initial Brief. This time, concerned that CLECs may not agree that a true-up applies to new collocation arrangements, AT&T proposes to add language that would impose such a true-up and allow AT&T to back bill in the amount of the meter reading to the date the collocation arrangement was turned over.[142] AT&T is correct about one thing. CLECs do object to a true-up for new collocation arrangements. AT&T's new proposal, as with many aspects of

[140] AT&T Initial Brief at 44.

[141] *Id.* at 45.

[142] AT&T Initial Brief at 46.

AT&T's self-certification scheme, will generate unearned income for AT&T. As noted above, the ongoing level of power usage will not become apparent until the telecommunications equipment is installed, tested and finally, used to transmit messages. More importantly, to the extent that the CLEC will not turn up its power on the first day that the space is turned over to the CLEC (which is a reasonable and real world assumption), then AT&T would be charging the CLEC for power that was never consumed. AT&T's latest proposal assumes full usage the moment AT&T turns over the power supply to the CLEC, thus guaranteeing that it would be billing for power that it will not provide.

AT&T argues that its new proposal is similar to rules adopted by the Florida Public Service Commission and the North Carolina Utilities Commission. According to AT&T, those commissions believed that billing from the turn-over date would provide incentives for CLECs to quickly install their equipment.[143] But neither those commissions nor AT&T has dealt with the fact that the ongoing power usage will not be known until the telecommunications equipment is installed, tested and connected to the network. AT&T did not identify whether the ILECs' tariff provisions in those states regarding occupancy are similar or dissimilar to those found in AT&T's tariffs here.

CLECs need no additional incentive to install and begin operating equipment in their collocation spaces quickly – collocation arrangements are acquired in order to serve their customers efficiently and CLECs have no interest or economic reason for delaying that process. To the contrary, the sooner that a CLEC's new collocation arrangement can be fully operational, the sooner it can generate revenues for the CLEC.

143 *Id.* at 46-47.

3. Language Dispute 3: Should The CLEC Self-Certification Be Based On A Physical Site, Measured Verification?

Section Reference: Paragraph 16A, First and Second Paragraphs

4. Language Dispute 4: Should CLECs Be Required To Self-Certify Once A Year Or Twice A Year?

Section Reference: Paragraph 16A, Second Paragraph

AT&T proposes that CLECs perform physical measurements for their initial self-certification and for the semi-annual self-certifications. At the outset, Joint CLECs note that all of the reasons advanced by AT&T for why CLECs should be required to take periodic physical readings of their collocation power usage support equally strongly requiring AT&T to take the readings – the argument that physical readings will provide the greatest accuracy does not resolve the issue of which party should be responsible to take the readings and can do so most efficiently.

AT&T's proposal requiring physical meter reading is another example of how AT&T's proposals make self-certification costly and cumbersome, and thus increasing the CLECs' cost of collocation. As noted by Mr. Turner, the engineering records for equipment will provide a power consumption level that will typically be higher than actual usage.[144] CLECs that choose to forego a physical site reading and instead rely on the higher levels shown in their records should have the opportunity to do so. They are the ones that are willing to make the trade-off of higher power costs for lower self-certification costs. Additionally, because AT&T can audit the results and obtain back billing, AT&T would not be harmed in the event that the use of engineering records results in lower charges than actual measurement.[145]

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[144] Tr. 296.

[145] *Id.* at 284.

AT&T argues that CLECs should not be allowed to rely on their records because the records may be "faulty" or even nonexistent. As support for its argument, AT&T cites to what it claims are inadequate data request responses.[146] Of course, because CLECs had no reason to keep such records in the past, their lack of records that satisfy AT&T is not surprising. The Commission can be assured, that if it authorizes a record-based self-certification plan that includes audits and penalties for inaccurate power measurements, CLECs will keep accurate and accessible records. Doing anything less than that will put the CLECs in danger of paying large back billed amounts and penalties.

The requirement for physical meter readings for the semi-annual self certifications is particularly burdensome. If a CLEC has added no equipment since the last physical meter reading, there is no reason to require it to take a physical site reading again. No witness has disputed the fact that modern, digital telecommunications equipment has very little change in power usage over time, regardless of increases in message traffic. Thus, requiring CLECs to conduct semi-annual audits would be wasteful and costly without adding any measurable accuracy in billing. Moreover, once the initial usage level is established, it is just as likely that actual usage could fall as rise above that level. Thus, CLECs are just as exposed to overpayment as AT&T is exposed to underpayment. Plus, under its proposal, AT&T would have the ability to conduct unlimited audits of the CLEC's usage and if it discovers sufficient discrepancies it can back bill and assess penalties, so AT&T's exposure is minimal and controllable.

AT&T claims that semi-annual physical measurements "would not place a hardship on the CLEC because it will have its technicians on-site at its collocation arrangements several times a year and should be able to take the required semi-annual readings in the normal course of

146 AT&T Initial Brief at 48.

its business."[147] As discussed above, AT&T minimizes the impact on CLECs of its proposal. The reality is CLECs may not have technicians qualified to measure power consumption at every collocation arrangement on a schedule that comports with the periodic, AT&T mandated schedule for taking the next physical reading and submitting the next self-certification. Thus, CLECs will likely need to either send technicians to their collocations to take power usage readings at times the technicians are not otherwise scheduled to be there, or will need to hire and train additional qualified personnel responsible for traveling between collocation sites measuring power consumption. In either case, this would be an inefficient process that would add little benefit at a large cost.

AT&T argues that if the Joint CLECs' non-physical self-certification alternative is accepted, then the tariff should include a provision that protects AT&T from the possibility that a CLEC would install but not activate equipment.[148] AT&T's proposal, which was not even incorporated in RAS-14, is unnecessary. AT&T will be conducting regular audits and has the right to back charge and impose penalties. Any CLEC that tries to avoid updating its power consumption measurements to reflect actual usage will gain no advantage and in fact, will suffer adverse financial consequences.

5. Language Dispute 5: Should AT&T Illinois Be Required To Offer A Service To CLECs In Which It Measures Usage At Power Delivery Arrangements?

Section Reference: None

To reiterate, Joint CLECs' basic position is that AT&T should continue to be responsible for measuring collocation power usage, which it can do by taking periodic readings with hand-

[147] AT&T Initial Brief at 48.

[148] AT&T Initial Brief at 49, n 19.

held amp meters, at no charge to the CLECs in light of the millions of dollars that CLECs have already paid to AT&T in non-recurring charges to pay for a power metering system. However, in the event that the Commission were to adopt AT&T's self-certification proposal in some form, CLECs have made the common sense proposal that if AT&T is already sending out meter readers to audit CLEC power consumption, then it by definition will have a force of trained, experienced meter readers. If the Commission believes that CLECs should be responsible for reading their own meters, it should give them the option of letting AT&T conduct those meter readings for an appropriate fee.[149] This would certainly be a more efficient industry solution than requiring every CLEC to develop the capability to take power usage readings.

AT&T objects to this proposal with the astonishing argument that meter reading is not within the Commission's jurisdiction because it is not a telecommunications service.[150] If the Commission has no jurisdiction over the measurement of power consumption, then what are we all doing here in this case? This entire proceeding is addressing the measurement of and charging for collocation power. If this Commission truly has no jurisdiction over meter reading, then it should dismiss this proceeding.

AT&T also argues that making it conduct meter reading "is also contrary to the very principle behind collocation" because CLECs, not ILECs, should operate the CLEC network.[151] AT&T ignores the fact that CLECs are lawfully collocated in AT&T facilities and taking power from AT&T as authorized by the federal Telecommunications Act. It would hardly be inconsistent with that arrangement for AT&T to also measure power and bill it; and generally speaking AT&T's implementation of the power metering architecture in 2000 was simply a

149 Jt. CLEC Ex. 2.2 at 20-21.

150 AT&T Initial Brief at 50.

151 *Id.* at 51.

system in which AT&T, not the CLEC, measured and billed for the CLECs' power usage. This is particularly true when AT&T will be auditing CLECs' usage and thus sending out trained technicians regardless of whether the CLECs self-certify their usage.

AT&T also complains that it does not always have onsite personnel at its central offices, so "it would be just as much work for AT&T Illinois as it would be for CLECs to travel to these locations to perform the requested measurements."[152] AT&T misrepresents its own witness' testimony when it asserts that "AT&T Illinois has *many* unmanned central offices", citing AT&T Exhibit 5.2 at 12-13 (emphasis added).[153] The exact statement by Mr. Smith was, "AT&T Illinois has unmanned central offices." Further, Mr. Smith did not know how many unmanned central offices AT&T has or what percentage of its central offices are unmanned.[154] He did, however, acknowledge that AT&T's unmanned offices will be located in remote areas with fewer customers;[155] those are areas, of course, where it is less likely that CLECs will be collocated (and consequently AT&T personnel will not have to travel to them in order to take power readings). As a result, it should be easy for AT&T to measure power with only a minimal amount of travel – and once again, AT&T can do this more efficiently than could dozens of CLECs operating individually.

Finally, AT&T raises the prospect of the rates for such meter reading being the subject of a "long, contentious and costly proceeding."[156] Setting AT&T's rate in that manner will occur only if AT&T wants it that way. CLECs have no interest in spending their resources fighting

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152 *Id.*

153 *Id.*

154 Tr. 150-51.

155 *Id.* at 151.

156 *Id.*

over the cost of meter reading. If AT&T establishes a fair price, the Commission's involvement should be minimal. In any event, until AT&T proposes a price, this concern is premature.

6. Language Dispute 6: Should The First Paragraph Of Paragraph 16A State That The Certification Will Contain A Statement Signed By A Responsible Officer Of The Collocator?

Section Reference: Paragraph 16A, First Paragraph

In yet another fit of editing its own proposal, AT&T proposes in its initial brief that it add a new sentence at the end of the first paragraph in 16A to make it clear that "a responsible officer" will attest to not only the initial certification and the semi-annual certifications, but also to any certification of new facilities.[157] This is yet another demonstration that AT&T's proposal is a moving target. AT&T's repeated modifications to its own self-certification plan is evidence that it is a half-baked scheme that will generate more problems than it solves.

As shown by Joint CLECs' opposition to this component of AT&T's proposal in our Initial Brief, AT&T is incorrect in asserting that "since this is only a matter of clarification, AT&T Illinois anticipates that Joint CLECs will not object to this language." As stated by Joint CLECs in their Initial Brief, AT&T does not have responsible officers certify the accuracy of its bills and CLECs should not be required to do so either.[158] There is no basis for requiring a "responsible officer" to verify the initial certification, the periodic certifications or the certification of new facilities. The bottom line is that a CLEC will be bound by its self-certifications whether it is verified by an officer, a non-officer or nobody.

[157] AT&T Initial Brief at 52.

[158] *See* Jt. CLEC Initial Brief at 57-58.

7. Language Dispute 7: Should There Be A 5 Amp Minimum For Power Delivery Arrangements Served From The BDFB?

Section Reference: Paragraph 17

8. Language Dispute 8: Should There Be A 51 Amp Minimum For Power Delivery Arrangements Fed From The Main Power Board?

Section Reference: Paragraphs 17 and 19

Joint CLECs will address the language disputes surrounding the minimum amperage charge together as they involve the same basic arguments and disputes.[159]

AT&T's minimum amp charge (5 amps or 51 amps) represents a marked and significant deviation from the law in Illinois under which CLECs should be charged for the amount of power actually consumed. AT&T all but admits this because it completely fails to explain how this minimum charge for power *not* consumed conforms to the 1998 Illinois Order. Moreover, the Commission could not have been clearer that CLECs are to be charged based on the amount of power consumed.[160]

AT&T's only attempt to justify having the Commission ignore the Illinois 1998 Order is a contrived assertion that the proposal must be reviewed in its entirety with potential off-sets, rather than having each aspect of the proposal reviewed on its own merits.[161] AT&T claims (as it did for the first time in surrebuttal) that there are sufficient cost savings that would offset the increase in costs associated with the minimum amperage charge. AT&T's analysis is faulty at best, and completely misleading. First, and foremost, the 1998 Illinois Order does not state that

[159] Joint CLECs note, however, that while the factual and policy arguments are the same for the 5 amp and 51 amp minimum charges, the glaring monetary differences are seen in the 51 amp minimum charges where a CLEC will be charged the minimum charge for *each* DC Power Delivery arrangement (not for each collocation arrangement). *See* Jt. CLECs Initial Brief at 47-48.

[160] The relevant provisions of the 1998 Illinois Order is quoted in full in Joint CLECs Initial Brief at 6-7.

[161] AT&T Initial Brief at 56.

the standard for charging CLECs is based on actual power consumed "on the whole and on the average."[162] AT&T's attempt to skirt around the issue of the Commission's direct and unmistakable directive to charge CLECs for power consumed is nonsensical and should be soundly rejected. This Commission did not provide any leeway on how and when CLECs should be charged for collocation power – it must be based on the amount of power actually consumed – no more and no less. Second, even if AT&T could identify any exception to this ruling, which it cannot, AT&T has not shown that the asserted "cost savings" in fact offset the increased costs associated with the minimum amp charge (either the 5 amp or 51 amp minimum charge per power delivery arrangement). Rather each "cost saving" pointed to by AT&T is an unsubstantiated factoid that may or may not result in cost savings. For example, while AT&T used a 6% lower shared and common cost factor in developing the proposed $9.80 per amp rate, all AT&T is doing is charging a perhaps minimally smaller per amp charge for power that the CLEC is *not* consuming.[163] AT&T also alleges that the audit provisions allow for flexibility and a buffer to CLECs, but again, AT&T fails to quantify how the use of the buffer by each CLEC will offset the increased costs associated with having to pay for power *not* consumed. Finally, AT&T again suggests that a CLEC will always use more power than the minimum, particularly at the 5 amp level. However, as Joint CLECs discussed above, the credible evidence in the record supports a finding that there are certain types of equipment deployed by CLECs that draw less than 5 amps.

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[162] *Id.*

[163] To be clear, AT&T is not entitled to any prizes for having used the shared and common cost factor adopted by the Commission in its 2004 Order in Docket 02-0864. This factor accurately represents AT&T's current shared and common costs. Using the shared and common cost factor used in setting the 28 cents per kWh rate several years earlier would be wrong.

AT&T's minimum amp charge constitutes a windfall because AT&T would be receiving compensation for power that is not actually being consumed.[164] AT&T now claims that it would not be receiving a windfall since if it is not allowed to impose a minimum amp charge, then it will under recover the costs associated with the DC Power Plant.[165] AT&T's argument is not a reason to ignore Commission precedent. First, although AT&T alleges that it is under-recovering the costs of the DC power plant if a CLEC is not paying for power, AT&T does not quantify the amount that it is under recovering and, therefore, it is impossible to determine whether AT&T's allegations are accurate.[166] But AT&T's analysis cannot be correct from a costing perspective because there are multiple situations in which a part of AT&T's network or facilities is not being used, but that does not mean that AT&T is allowed to charge a "minimum" charge. For example, if AT&T has collocation space available, but unused by any CLEC, AT&T is not authorized to make each resident CLEC pay for a minimum amount of collocation space over and above what they have ordered. In most instances, from a costing perspective, this situation (unused capacity or space) is accounted for by using a fill factor in the calculation of investment costs. AT&T has not alleged or shown that the fill factor was too low or too high to prevent it from recovering costs associated with its DC power plant. Only by going through a

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[164] Jt. CLEC Ex. 2.2 at 4-7. Joint CLECs reiterate that, as shown in AT&T witness Brissenden's schedules, **BEGIN PROPRIETARY** **END PROPRIETARY** of the current 28 cents per kWh rate, which has been converted to $9.80 per amp per month, represents AT&T's out-of-pocket expense to pay its electricity supplier for AC power delivered to the central office.

[165] AT&T Initial Brief at 55. At least AT&T should be credited for providing some comic relief in this portion of its Initial Brief by suggesting that the entire Public Switched Telephone Network may collapse if AT&T is not allowed to impose the 5 amp and 51 amp minimum power charges on collocators. *Id.* at 53.

[166] Moreover, as pointed out in Section III.A above, the converted per amp rate includes a significant component tied to the cost of obtaining electricity from an electric utility. If a CLEC is not drawing power that would require AT&T to obtain electricity from the utility, then the CLEC should not be expected to pay for electricity that it does not use. AT&T did not propose any modifications to its rate design to account for potential "underrecovery" and should not be allowed to impose a minimum amperage requirement to account for AT&T's failure to substantiate its claim.

detailed analysis of a cost study establishing the per amp rate could any conclusion be reached as to whether the current rates enable AT&T to fully recover the costs associated with its DC Power Plant. Because AT&T has failed to provide such an analysis, its generalized assertions should be disregarded.

Finally, AT&T attempts to justify its minimum amp charges by pointing to Verizon Illinois' collocation tariff that purportedly has a 10 amp minimum charge.[167] First, the Verizon collocation tariff is not at issue in this case – the issue is whether AT&T has justified charging a minimum amp charge that is inconsistent with the specific directive from the Commission in the 1998 Illinois Order. Second, AT&T has failed to show that the Verizon collocation tariff was adopted after a contested case proceeding, and thus, whether the Commission was asked to enforce its determination that CLECs should be billed for power actually consumed. To the extent that other CLECs that do business with Verizon in Illinois determined that the rate structure under Verizon's tariff was workable for them in Illinois, then that is a choice made at that time. Moreover, AT&T has not established that CLECs participating in this case also take collocation from Verizon in Illinois. In fact, certain CLECs such as Covad do not interconnect or have collocation arrangements with Verizon in Illinois (thus explaining why the minimum per amp charge was not contested).

For all of these reasons, AT&T's minimum amp charges (both the 5 amp at the BDFB and 51 amps at the power board) should be rejected.

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[167] *Id.* at 56-57.

9. Language Dispute 9: Should Applicable Charges Be Waived Under The "Power Fuse Reduction" Feature Only When Fuse Sizes Are Decreased, Not Increased?

Section Reference: Paragraphs 18 and 19

As Joint CLECs explained in our Initial Brief, there are two major short-comings to the AT&T power fuse reduction proposal: (a) it is a short-term promotional offering (only available for 12 months), and (b) the proposal is voluntary. Thus AT&T cannot claim benefits that may or may not happen. However, to the extent that the Commission wants to allow AT&T to offer a power fuse reduction proposal that would entice CLECs to reduce their fuse sizes (for only the cost of a service charge), then Joint CLECs also propose to reflect the situation where a CLEC reduces its fuse size as a result of this promotional offer, and then needs to increase its fuse size due to increased power consumption; CLECs proposed that the CLEC should only be required to pay the service charge in that situation as well. AT&T objects to the Joint CLECs' proposal claiming that CLECs are seeking a free ride.[168] But that is not the case at all. Joint CLECs only request that they pay the reduced rate when they increase fuses back to current levels after taking the short-term promotion. Joint CLECs submit that this proposal will actually provide an incentive to consider the fuse reduction proposal because there will be certainty as to the rates that will apply in the event that a CLEC later needs to increase its fuse size again after having taken the promotion. At this point, because there are no rates or rate structure for fuse increases, CLECs are faced with the choice of (a) reduce fuse sizes now (if that is appropriate for their collocation arrangement) under AT&T's short term offering and pay only a service order charge, but when they need to increase the fuses to accommodate a request for more power, be prepared to pay individual case basis rates (as there are no terms, conditions, or rates for fuse increases);

[168] AT&T Initial Brief at 60

or (b) to keep the fuses at the level they are now to ensure that the CLEC does not have to pay unknown future charges as explained in option (a). Under Joint CLECs' proposal, in contrast, CLECs would have an incentive to reduce fuse sizes in certain collocation arrangements (paying only the service charge), and thus allowing AT&T to "manage" its power plant better, while at the same time CLECs would know that in the event they needed to increase the size of their fuse back to the original size (at least), then all they would have to pay is the service order charge. Without Joint CLECs' proposed change, there simply is little, if any, incentive for CLECs to use the fuse reduction proposal.

10. Language Dispute 10: Should AT&T Illinois Be Limited To One (1) Audit Per Year?

Section Reference: Paragraph 21A

The Commission should reject AT&T's request for the right to conduct an unlimited number of audits on each collocation power arrangement. AT&T's proposal would result in an unreasonable burden being imposed on CLECs. A limitation on the number of audits would provide CLECs and AT&T with incentives to act responsibly. Joint CLECs therefore proposed that AT&T generally be allowed to conduct one audit per year for each collocation power arrangement unless an audit concludes that a CLEC's self-certification was 20% or more below actual usage. In the latter case, AT&T could audit that collocation arrangement one additional time during the calendar year.

AT&T argues that it needs the threat of repeated audits in order to encourage CLECs to make accurate self-certifications. AT&T speculates that once a CLEC is audited, it will "game the system" and begin to lie in its self certifications, secure in the knowledge that it will take at least one year for it to get caught.[169] The Commission should reject this display of paranoia. The ability of AT&T to back bill and impose penalties for underreporting usage will discourage such activity, assuming it would take place at all.

AT&T disputes the Joint CLECs' argument that repeated audits will subject them to undue administrative burdens, pointing out that CLECs do not participate in the audits.[170] AT&T misses the point. It is not repeated audits that will cause disruption. Rather, disruption will be caused by the need to respond to repeated notification of changes in usage, with potential back billing and penalties.

11. Language Dispute 11: Should AT&T Illinois Be Required To Provide CLEC With Notification Of The Audit Results For All Audits, Or Only For Those Audits That Actually Impact The CLEC?

Section Reference: Paragraph 21A

Having established its elaborate audit scheme, which will be unlimited if AT&T is successful on the previous issue, AT&T wants to hide any audits that do not result in increased charges to the CLECs. AT&T's proposal reduces the effectiveness of the audit process, which could be used by both parties to ensure more accurate reports of power consumption. With access to the audit reports, CLECs could attempt to reconcile differences in readings *before* the difference reaches a level necessitating billing adjustments. This would allow for more accurate readings and it would prevent disputes.

AT&T's only response to this reasonable request is to argue it will incur the expense and administrative burden of preparing and providing the information in the audits, so CLECs should

169 AT&T Initial Brief at 61.

170 *Id*.

only receive copies when the discrepancy is large enough to result in backbilling.[171] This argument is unsubstantiated. AT&T admits that it will have to develop internal processes by which an AT&T technician will take the audit reading, the technician will submit the results to AT&T's administrative staff, someone will review the results and decide if an upward billing adjustment is necessary, and if so, send some notification to the CLEC. Joint CLECs submit that given these necessary internal steps, AT&T will incur virtually no incremental costs to send all audit results to the CLECs, even if no billing adjustment is called for.[172] AT&T's argument demonstrates that it is not really interested in accurate billing. It would rather play a game with CLECs than provide them with information that could help lead to self-certifications that are closer to actual usage.

12. Language Dispute 12: Should AT&T Illinois Be Required To Cooperate With CLECs To Prepare A Standard Notification Form?

Section Reference: Paragraph 21A

In an effort to cooperate with AT&T, Joint CLECs proposed that the two parties collaborate to develop a standard notification form that would be provided with audit results. The reason for this proposal is that CLECs would not be able to reconcile their readings with those of AT&T if they do not know: a) the date and time of audit; b) the location of the collocation arrangement audited (by CLLI, fuse position and bay); c) the equipment used to perform the audit (by manufacturer and model) and d) the number of amps measured.[173]

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171 AT&T Initial Brief at 63.

172 *See* Jt. CLEC Initial Brief at 65-66.

173 *See* Jt. CLEC Ex. 2.2, Sch. SET-3 at § 21A.

AT&T complains that this is a pointless requirement because AT&T Illinois and the CLECs have already agreed upon the information that must be provided in paragraph 21A of RAS-14 and requiring it to cooperate with the CLECs "could only lead to unnecessary disputes which may have to be resolved by the Commission, with the attendant delay and expense."[174] This is admittedly a small issue that will have no consequence if AT&T creates a form that effectively provides the necessary information. Nevertheless, it is telling that despite all its arguments about the need for determining collocation power usage as a collaborative process between AT&T and the CLEC industry, AT&T rejects collaboration on the simple task of developing a standard notification form.

13. Language Dispute 13: Should AT&T Illinois Be Required To Adjust A CLEC's Billing If The Audit Result Indicates That Actual Usage Is Less Than The Certified Amount?

Section Reference: Paragraphs 21B and 21C

Joint CLECs will not insist that AT&T should be required to make downward as well as upward billing adjustments based on the results of its audits, so long as CLECs (1) are provided with notification by AT&T of all audit results; and (2) receive the audit results. The CLEC can then use that information to evaluate whether it wants to submit a revised self-certification to AT&T.

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[174] AT&T Initial Brief at 64.

14. Language Dispute 14: Should The Collocator Represent And Warrant That, Under Normal Operating Conditions, It Will Not Draw More Than Its Collocator-Specified Amperage Load?

Section Reference: Paragraphs 16A and 17

CLECs and AT&T have no dispute on this issue at this point. AT&T has agreed to add language that allows CLECs to certify that the words "under normal operating conditions" be added to the language concerning the certification of power draw in Paragraph 17, so that it would now read as:

> Under this provision the Collocator represents and warrants that, under normal operating conditions, it will not draw more than its Collocator-Specified Amperage Load on the DC power leads provided by AT&T Illinois for a power arrangement.

The comparable language that appears at three places in Paragraph 16A would also be revised to insert a reference to "under normal operating conditions."

15. Language Dispute 15: Should Joint CLEC-Proposed Language At The End Of Paragraph 21D Be Included?

Section Reference: Paragraph 21D

Joint CLECs made the logical proposal that they should not be responsible for audit costs if a dispute resolution ended in their favor. Understanding AT&T's concern that the definition of a successful dispute resolution is unclear, Joint CLECs agreed in their Initial Brief that a dispute resolution would only be successful if it resulted in CLEC usage being below the triggering point (20% or greater underreporting of usage). AT&T appears to come to the same conclusion in its Initial Brief, so there is minimal dispute between the parties' intentions. The only issue is whether adding the Joint CLECs' proposed language does a better job of reflecting that intention than omitting it. Joint CLECs still believe that adding their proposed language would clarify the CLECs' obligations because it addresses both the payment of the penalty and true-up of amounts already paid by the CLEC based on AT&T's audit. Omitting the Joint CLEC language would leave the CLEC unreimbursed for any charges it paid based on the incorrect audit.

CLECs reiterate that if AT&T is required to take the meter readings there is no need for CLEC self-certifications or audit provisions. It is much simpler, more efficient and less costly to require AT&T, not the CLECs, to measure power usage for billing to CLECs.

V. AT&T Must Adopt Some Form of Power Metering. (Response to Section V of AT&T's Initial Brief)

AT&T's schizophrenic recommendations to the Commission, to address its own flawed engineering decisions, was not limited its testimony. In its Initial Brief, after spending over fifty pages describing how CLECs should be responsible to meter the power consumed, AT&T argues that any "form of power metering should be rejected."[175] However, power metering *by the CLEC* is precisely what AT&T has recommended in Schedule RAS-14. Now, the question for the Commission in this proceeding is how the metering will take place, and who should be responsible for metering.

AT&T opposes each of the alternatives raised by both Staff and the Joint CLECs, including, the proposals where AT&T uses hand-held meters to measure power. Regardless of whether the alternatives addressed in this proceeding are viable, the Commission should reject, in their entirety, AT&T's proposed tariffs. At most, the Commission need only authorize the replacement of the present per-kWh rate with the $9.80 per amp per month rate.

175 AT&T Initial Brief at 73.

A. Supply-Side Metering With Shunt Bars Is A Viable Solution. (Response to Section V.A of AT&T's Initial Brief)

AT&T criticizes the Joint CLECs for making a "tepid endorsement" for supply side metering with shunt bars.[176] To be clear, Joint CLECs' primary position is that the Commission should simply direct AT&T to comply with the Commission's directives in the Illinois 1998 Order; which mechanical device it chooses to measure power is entirely up to AT&T, so long as AT&T does not shift the burden to CLECs to measure power usage, and as long as the chosen method accurately measures the power consumed. AT&T made the initial choice to use return side metering without consulting either the CLECs or the Commission, and Joint CLECs would expect that AT&T can choose a different mechanical method that complies with the Commission's orders.

Joint CLECs do dispute AT&T's claims that supply side metering is unreliable, unsafe, or extraordinarily expensive to implement. Using PMUs and shunts is not itself a defective form of measuring actual electricity usage. What was defective was AT&T's choice to install PMUs on the return side of the power delivery arrangement.[177] These same PMUs and shunts can and should be deployed by AT&T on the supply side of the power delivery arrangement. AT&T, Staff and Joint CLECs all agree that using the PMUs and shunt devices AT&T currently uses on the supply side of the power delivery arrangement would result in accurate power measurements, without the need to abandon the equipment already paid for by CLECs through the payment of millions of dollars in nonrecurring charges to AT&T.

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176 *Id.*

177 Jt. CLEC Ex. 2.0 at 46.

AT&T claims, with no supporting empirical data, that supply side meters are a threat to personnel because "power metering, by its nature, requires that DC power circuits be broken in order to install the shunt bars on the supply-side."[178] AT&T claims that because shunts are an exposed metal plate, dangers associated with shunts "persist even after shunts are installed."[179] However, AT&T determined years ago that using shunts and PMUs was safe, efficient and reliable as a means to comply with the Commission's prior orders. AT&T's claims that shunts and PMUs are somehow dangerous is discredited by the fact that these are the exact same devices that AT&T elected to use in the first place, and which are in place today. Moreover, when asked how many injuries the current shunt devices have caused, AT&T responded by saying that AT&T personnel have incurred no such injuries.[180] AT&T's claims that the shunts will increase the likelihood of an electrical shock are likewise unfounded. As Mr. Turner noted in his testimony, there are power shunts available with casings that completely cover the metal bars so that inadvertent contact by telecommunications personnel or their tools can be avoided, thus eliminating a chance of an accidental electrical short that AT&T is now concerned about.[181] In fact, AT&T does candidly acknowledge that the casings described by Mr. Turner would "mitigate the safety issue."[182]

AT&T also theorizes that because measuring power using PMUs and supply side shunts requires more such shunts than the current return side metering, there would be an increase in the

[178] *Id.*

[179] *Id.*

[180] McLeodUSA Ex. 107 (AT&T Response to Qwest Data Request No. 2.24).

[181] Jt. CLEC Ex. 2.1 at 48-49. These casings are also available with simple key locks that can prevent unauthorized or untrained personnel from gaining access to the shunts.

[182] *Id.* at 72.

potential danger.[183] However, AT&T's argument is pure speculation. As noted above, AT&T reports that there have been *zero* injuries resulting from the use of return side shunts. The fact that there would be more shunts in place with supply side metering does not establish that there would be any additional injuries. While Joint CLECs do not intend to minimize legitimate safety concerns, the fact is that trained telecommunications personnel and electricians work every day in environments involving live electric power feeds, without incident.

Next, AT&T asserts that the supply side shunts with PMUs would not be feasible because of the congestion caused by installing the devices on the supply side of the power delivery arrangement.[184] Attention to detail is important here. AT&T argues that "in a supply-side metering architecture, the shunt assembly . . . would all have to go in the cable racking (but would have to remain accessible), exacerbating congestion where it already exists and creating congestion where it does not."[185] However, Mr. Turner rebutted these claims, showing that the shunt assemblies and PMUs are small and do not take up significant room, and are connected to the existing wiring with very thin wire.[186] The thin wire connecting the PMUs to the power delivery arrangement would not create congestion. A vague contention that supply side metering would "creat[e] congestion in some cases" is an insufficient basis for the Commission to completely modify AT&T's existing tariff, and to adopt AT&T's self-certification proposal that would shift the costs and burdens of measuring collocation power usage to the CLECs.

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[183] AT&T Initial Brief at 71.

[184] *Id.*

[185] *Id.*

[186] Jt. CLEC Ex. 2.0 at 46.

AT&T next claims that supply side metering would not work because the installation of shunts on the supply-side would disrupt CLEC operations.[187] Here again, AT&T's claims are based on speculation. While it is true that the DC power circuit would have to be broken into to install the shunt, AT&T has already broken into the DC power circuit when it installed the shunt assemblies that are in operation today.[188] AT&T knows how to perform this task without disruption, and because there is a redundant power supply to the CLEC equipment, the installation of the supply side PMUs can occur without interrupting the power supply to the equipment.[189]

AT&T's final argument in opposition to the supply side shunt assembly is that it would be expensive to add a shunt-based supply-side metering solution.[190] However, AT&T assumes that the existing return-side architecture costs approximately $3.8 million.[191] AT&T's suggestion to abandon any power metering effort would be even more costly – abandoning $3.8 million invested by the CLECs in the current power metering devices.[192] Moreover, if AT&T's claims that it has lost in excess of $25 million in unbilled power usage are true, AT&T should have spent the money years ago to install supply side metering in order to mitigate the losses incurred as a result of its own faulty engineering decisions.

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[187] AT&T Initial Brief at 72.

[188] Jt. CLEC Ex. 2.0 at 49.

[189] *Id.*

[190] AT&T Initial Brief at 73.

[191] *Id.*

[192] AT&T goes on to claim that the additional costs associated with supply side metering would be attributable to the CLECs. Joint CLECs vigorously dispute this claim, particularly in light of the history of power metering in Illinois. However, that issue is not before the Commission in this case. The evidence in this proceeding supports the conclusion, in light of AT&T's faulty engineering decisions, that the cost to retrofit to a supply side system, or any other system, should be borne by AT&T alone. *See* Jt. CLEC Initial Brief at 31-38.

B. Supply-Side Metering With Split Core Transducers Is A Viable Alternative Solution. (Response to Section V.B of AT&T's Initial Brief)

AT&T also takes issue with the Joint CLECs' suggestion that using split core transducers is an alternative method of measuring collocation power. AT&T reiterates the same claims it made relating to supply side PMUs and shunt assemblies, arguing that "split core transducers are unworkable for many of the same reasons that supply-side unworkable and hazardous to the network."[193] While AT&T criticizes Mr. Turner for not providing a complete record for the Commission to *order* AT&T to implement split core transducers, the only argument that AT&T puts forward to oppose split core transducers is that "they create further congestion in the overhead cable racking and complicate the job anytime the power cable needs to be worked on." AT&T does acknowledge though that at least two of its reasons for opposing use of supply side shunts would not apply to split core transducers. AT&T agrees that split core transducers "would be somewhat less difficult to install in that it does not require that the live power cable be broken", and further that "split core transducers do not present the danger of exposed metal shunts (as is the case with supply side shunts)."[194] While AT&T claims that split core transducers would need to be calibrated due to changing magnetic forces,[195] Mr. Turner noted that transducers can be installed on the drop cable that goes to each CLEC collocation space, reducing any adverse effect relating to magnetic forces, thereby minimizing the calibration concerns raised by AT&T.[196]

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193 AT&T Initial Brief at 74.

194 *Id* at 76.

195 *Id.* at 78.

196 Tr. 362.

So in the end, there is no known safety, engineering or network reliability problem associated with split core transducers that would prevent AT&T or the Commission from adopting this technology. CLECs note again that the Commission has required AT&T to measure the power; how AT&T chooses to implement that policy on its own network is AT&T's decision. Joint CLECs have shown that several viable alternatives are available to AT&T.

AT&T does attempt to speculate on the cost of split core transducers, claiming that because a shunt-based system would cost between $11 million and $15 million to install, split core transducers would also cost the same.[197] AT&T's conclusory assertions should be disregarded.

C. AT&T's Objections to an Approach in Which AT&T Measures CLECs' Collocation Power Usage by Taking Period Readings With Hand-Held Meters Are Unfounded. (Response to Section V.C of AT&T's Initial Brief)

As shown in Sections I and III.B of this Reply Brief as well as in Section II.C of Joint CLECs' Initial Brief, probably the *most* appropriate and cost-effective solution to the problems created by AT&T's return-side metering system in which AT&T continues to be responsible (as it is today) for measuring collocation power usage for billing purposes is that AT&T take periodic readings using hand-held amp meters. AT&T buries its discussion of this approach in a brief three-page discussion near the end of its 85-page Initial Brief, perhaps in hopes that this fair and reasonable outcome will be ignored or will go away. However, as shown in Section III.B of this Reply Brief, the "hand-held metering" solution is more appropriate than AT&T's self-certification proposal, even when judged by AT&T's own self-selected "relevant policy objectives."

[197] AT&T Br. at 77.

To be clear, AT&T's objections to the hand-held metering solution have nothing to do with the accuracy of measurements taken with hand-held meters or the ease of using these devices to obtain accurate amperage readings of CLECs' collocation power usage. As discussed elsewhere in this Reply Brief and in Joint CLECs' Initial Brief, there is no dispute in this case on those topics.[198] Indeed, as pointed out previously, under its self-certification proposal, AT&T expects CLECs to use hand-held meters to take periodic readings of their collocation power usage, and AT&T expects to use hand-held meters to conduct audits of CLECs' collocation power usage.[199] No other viable means of performing these tasks other than using hand-held amp meters, has been identified in this case.

Rather, AT&T's real objection to the hand-held metering solution is that it would thwart AT&T's plan, introduced in the middle of this case, to shift the costs and administrative burdens of measuring collocation power usage from AT&T (where it rests today pursuant to the Illinois 1998 Order) to CLECs. AT&T complains that under the hand-held metering approach, CLECs would not be responsible for knowing how much power they are using, would not be responsible for measuring their power leads and would not be responsible for telling AT&T when their usage increases or decreases over time.[200] However, all of this is true under the system for measuring and billing for collocation power usage that is in place today pursuant to the Illinois 1998 Order.[201]

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[198] *See* Jt. CLEC Initial Brief at 20 and Section I of this Reply Brief. *See also* Staff Initial Brief at 11.

[199] McLeodUSA Ex. 107 (AT&T Response to QCC Data Request 3.13); Tr. 335-36.

[200] AT&T Initial Brief at 79.

[201] AT&T's assertions, of course, are typically exaggerated. While it is true that today, and under the hand-held metering solution, the CLEC is not responsible for determining its power usage for billing purposes, it is up to the individual CLEC as to whether and, if so, how often, the CLEC wants to verify the accuracy of the bills it is receiving from AT&T, whether by comparing the usage measured and billed by AT&T to the CLECs' own engineering analysis of the power draw of its installed equipment, or by taking an actual physical measurement.

As discussed in Section III.A of Joint CLECs' Initial Brief, AT&T filed the tariffs that resulted in this proceeding for the purposes of eliminating the use of its flawed return-side power metering system, switching the basis for billing for collocation power usage from "per kWh" to "per amp" used, and establishing the "per amp" rate at $9.80 per amp per month. These three fundamental objectives are achieved by allowing AT&T to move to a system in which it measures CLECs' collocation power usage for billing purposes by taking periodic readings using hand-held meters, and changing the usage rate in the tariff from 28 cents per kWh to $9.80 per amp per month. No other changes from the status quo are necessary. Certainly, a shift to a system in which (1) CLECs become responsible for measuring their collocation power usage by taking periodic physical readings at each collocation site (using hand-held meters) and reporting the results to AT&T, and (2) AT&T establishes a duplicative system of audits (unlimited by the tariff as to frequency), is unnecessary and unwarranted in order to eliminate the problems resulting from AT&T's return-side metering system.

AT&T complains that it is untrue that its self-certification proposal shifts all the burdens of determining collocation power usage to the CLECs, because under its proposal AT&T would bear the costs and burdens of performing audits.[202] However, the need for audits is entirely a function of AT&T's self-certification proposal; they are completely unnecessary if AT&T simply takes the readings necessary to bill the CLECs for their DC power usage. Further, since AT&T has refused to limit its audits to one audit per collocation per year, but instead insists on the right to conduct an unlimited number of audits[203] – meaning, obviously, at least two per year, since AT&T refused to accept a limit of one audit per year – it is perplexing why AT&T is not

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[202] AT&T Initial Brief at 79.

[203] *Id*. at 60-62.

willing simply to take physical readings twice per year and use the results for billing purposes.[204] Similarly, AT&T argues that it has "liberally" offered to make no billing adjustment when its audit identifies a discrepancy of 9% or less from the usage reported in the CLEC's last self-certification.[205] Again, AT&T's benevolence is solely a function of its own self-certification proposal. If AT&T remains responsible for measuring the CLECs' DC power usage by taking periodic readings with hand-held amp meters, Joint CLECs have no objection to being billed for collocation power usage based on the exact amperage values that AT&T measures.

AT&T argues that CLECs cannot contend that being required to take periodic physical readings of their usage at each collocation is an "undue hardship".[206] Joint CLECs objection to AT&T's self-certification proposal is more basic – fundamentally, there is no justification for shifting *any* costs and administrative burdens of measuring and reporting collocation power usage to the CLECs, and certainly not in order to solve the problem AT&T was seeking to solve when it filed the tariffs that initiated this case. AT&T argues that requiring CLECs to take physical site readings of their DC power usage every six months is not an "undue hardship" because (1) it takes only about five minutes to take a measurement, and (2) CLECs will likely be present at their collocations about once every six months, or twice per year.[207] However, AT&T's depiction of the facts is incomplete and misleading in several respects.

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[204] Joint CLECs refer to AT&T taking physical readings using hand-held meters two times per year solely because that is the number of physical readings that AT&T wants CLECs to take under its self-certification proposal, so Joint CLECs presume that AT&T believes two readings per year to be sufficient. However, AT&T would be free to take readings more frequently than twice per year if it wished to do so.

[205] *Id*. at 79.

[206] *Id*.

[207] *Id*. at 79-80. Of course, it would only take an AT&T technician 5 minutes per power delivery arrangement to take a physical reading, too.

First, the five minutes per reading testified to by Mr. Turner is per power delivery arrangement;[208] at a typical collocation site with three, four or more power delivery arrangements, the time required just to take the readings would be 15 minutes, 20 minutes or more. Second, the estimated five minutes is only the time to clamp on the hand-held meter and take the usage readings on a power delivery arrangement; it excludes the more significant cost of travel time to the collocation site.[209] Third, AT&T attempts to argue that travel time should not be a factor because CLECs can be expected to have a technician at each of their collocation sites about once every six months.[210] However, CLEC technicians will travel to the CLEC's collocation sites to perform scheduled maintenance work or emergency repair work. It will only be coincidental if the maintenance schedules or need for emergency repairs coincide with the "due date" for the CLEC's next required physical read of its power usage at that collocation site. Absent this happy but no doubt infrequent coincidence, it will be necessary for CLEC technicians to travel to the CLEC's collocations specifically for the purpose of taking the periodic physical usage readings required under AT&T's self-certification proposal – thereby adding substantial travel time to the cost of implementing AT&T's proposal.[211] Fourth, CLECs will also have to establish new internal processes, and incur the associated additional administrative costs, for their technicians to transmit the results to the CLEC's administrative staff and for the administrative staff to process the results, prepare the self-certifications and

208 Tr. 250.

209 *Id.* at 250, 293-294.

210 AT&T Initial Brief at 79.

211 *See* Tr. 292.

submit them to AT&T. Finally, as AT&T witness Mr. Smith acknowledged, the above activities represent costs that CLECs do not incur today.[212]

As stated previously, the bottom line on this point is that (1) AT&T undoubtedly has its technicians at its central offices much more frequently (often on a daily basis) than an individual CLEC will have its technicians at its collocation at an AT&T central office, and (2) it will always be more efficient on an overall industry basis for <u>one</u> AT&T technician to take amperage readings for <u>all</u> of the CLEC collocations at a central office than it will be for <u>each</u> CLEC to send a technician to its respective collocation at that central office to take a reading.

AT&T next complains that under the hand-held metering solution, it will not know if or when a CLEC's collocation power usage changes (upward or downward) between AT&T's readings, due to activation of new equipment or deactivation of existing equipment by the CLEC.[213] This concern is resolved in one or both of two ways. First, if AT&T's physical reading shows a different amperage level of usage than AT&T's previous reading, AT&T could be allowed to back-bill the CLEC for the difference to the time of the prior reading (*i.e.*, six months). Second, Joint CLECs would not object to a requirement, as part of the hand-held metering approach, that CLECs be required to give AT&T prompt notification upon activating new equipment or deactivating existing equipment such that the CLEC's DC power usage at that collocation may be expected to change. In that event, the back-billing adjustment would cover the period from AT&T's next physical reading back to the date of the equipment change.

AT&T further complains that the hand-held metering approach "absolves" CLECs "from any responsibility for managing their own networks" and for "working cooperatively with

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212 Tr. 143.

213 AT&T Initial Brief at 80.

AT&T."[214] AT&T's first point is ridiculous – CLECs would not be "absolved from any responsibility for managing their own networks", or even from responsibility for managing their power usage, any more than is the case today under the power-metering system that AT&T unilaterally chose to implement.[215] AT&T's second point is outrageous given that AT&T hid the problems with its return-side power metering system from its customers for almost four years after discovering the problems and made no attempt to "work cooperatively" with the CLECs to find a solution.[216] AT&T further asserts that "CLECs, as buyers of DC power, should at least be required to tell AT&T Illinois how much DC power they wish to buy", and that "[i]t is a normal part of any business transaction for the buyer to tell the seller how much it wishes to purchase".[217] However, as the Commission is well aware (and AT&T purports not to know), this is not the case with electric power – an electricity customer does not tell the electric supplier in advance "how much it wishes to purchase", but rather is billed based on its actual usage, at the end of the billing period, based on the usage recorded <u>by the supplier</u> on the meter that is owned <u>by the supplier</u>. Indeed, that is the premise of the return-side metering system that AT&T decided to implement in response to the Commission's Illinois 1998 Order. It was not until after AT&T concluded that its return-side metering system was not workable that it suddenly determined that the collocated CLECs should be responsible for telling AT&T how much DC power the CLECs have used.

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214 *Id.*

215 It will still be the case that the more DC power a CLEC uses at its collocations, the higher the collocation power costs it must pay to AT&T, so a CLEC will continue to be rewarded financially for using DC power efficiently and penalized financially for using DC power inefficiently. These impacts are independent of the resolution of the issue of which party is responsible for taking measurements to use for billing purposes.

216 *See* Jt. CLEC Initial Brief at 2, 8-10, 32. *See also* Tr. 162-67.

217 AT&T Initial Brief at 80-81.

Next, AT&T raises the specter of frequent disputes between CLECs and AT&T over collocation power billings if the hand-held metering solution is adopted.[218] This concern is speculative and unsubstantiated by any evidence. In particular, AT&T did not submit any evidence in this proceeding that even a single CLEC has disputed a collocation power bill from AT&T over the last four years while AT&T has been measuring usage for billing purposes, let alone that any such disputes have reached the point of becoming proceedings before the Commission. At worst, the likelihood of disputes under a system in which AT&T continues to measure CLECs' DC power usage for billing purposes by taking readings using hand-held meters is no greater than the likelihood of disputes between CLECs and AT&T over AT&T's audit results under its self-certification proposal.[219]

AT&T's final objection to a solution in which AT&T continues to measure CLECs' DC power usage for billing purposes by taking readings using hand-held meters is that it provides no ability for AT&T to charge CLECs for the cost of taking readings. As Joint CLECs pointed out in our Initial Brief, such an outcome is quite fair and reasonable under the circumstances since AT&T has already collected millions of dollars from CLECs to pay for a system that was supposed to measure the CLECs' collocation power usage for billing purposes without their involvement.[220] If AT&T were to continue to be responsible, as it is today, for measuring CLECs' collocation power usage for billing purposes, but were allowed to do so by taking

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[218] *Id.* at 81.

[219] Under a system in which AT&T takes hand-held readings and bills the CLEC for collocation power usage, a CLEC will have to have a sound basis for disputing a bill, or it will be wasting its time and resources on the effort. That presumably means that the CLEC, upon making an initial determination that the amount billed by AT&T appears suspect, would go to the collocation in question to take its own reading to compare to AT&T's billed amount. However, under such a system it would be up to the CLEC (assuming it sees any basis for doubting AT&T's billed usage amount in the first place) to either incur the cost of taking a reading to see if there is a basis to dispute AT&T's bill, or simply pay the bill and avoid the cost of taking its own reading.

[220] *See* Jt. CLEC Initial Brief at 37-38 and 43-45.

periodic readings using hand-held meters, then the CLECs would continue to receive what they have already paid for – a functioning power metering system – and AT&T would be relieved of the underbilling problem it has experienced due to flaws in its return-side power metering system. In any event, it is AT&T's responsibility to propose cost-based charges for its services, not the responsibility of the CLECs. As noted above, Joint CLECs suggested during the course of this proceeding that AT&T could develop a charge for taking collocation power usage readings with hand-held meters, and AT&T rejected that suggestion.[221] AT&T, therefore, should not be heard to complain about the lack of a charge for this function.

In summary, there is no basis for AT&T's objections to adoption of a solution to the current power metering problems in which AT&T continues to be responsible (as it is today in accordance with the Illinois 1998 Order) for measuring CLECs' DC power usage for billing purposes by taking periodic readings using hand-held meters. The record shows that this solution is a fair, reasonable and appropriate solution to the problems resulting from AT&T's implementation of its return-side power metering system, and that it is a more appropriate and cost-effective solution than AT&T's self-certification proposal would be.

D. Use of an Adjustment Factor to Bill for Collocation Power Usage Based on the Measurements Taken by AT&T's Return-Side Power Metering System. (Response to Section V.D of AT&T's Initial Brief)

Joint CLECs addressed this topic in Section II.D of our Initial Brief, and refer the ALJ and the Commission to that section for a discussion of Joint CLECs' views on the concept of billing for DC power usage by applying an adjustment factor to usage measurements recorded by AT&T's return-side metering system.[222]

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221 *See* Section IV.5 of this Reply Brief.

222 Jt. CLEC Initial Brief at 23-31.

VI. Conclusion

Contrary to AT&T's assertions, and as evidenced by Joint CLECs' Initial and Reply Briefs, this case is about far more than AT&T's late filed and ill-timed self-certification process in RAS-14. This case is about whether the Commission should implement tariff changes that will allow AT&T to shirk responsibility for implementing a power metering architecture in 2000 that ultimately has not worked accurately, to ignore that AT&T is in the best position to continue to measure CLECs' collocation usage since the facilities are located within the AT&T central offices, and to shift the burden of measuring to the CLECs by creating a duplicative and operationally chaotic process in which CLECs must take measurements every six months and also be subject to unlimited audits and risks associated with those audits. Moreover, even AT&T's proposed self-certification process is structured to make the process burdensome and difficult for CLECs. Joint CLECs submit that the evidence in this record and sound and reasonable regulatory policy mandates that AT&T's self-certification process be rejected in all aspects. Joint CLECs respectfully request that the Commission approve a per amp rate of $9.80 for DC Power and require AT&T to continue to measure CLECs' collocation power usage. AT&T should be required to implement or to use alternatives that are available to it today without the Commission's directives; but if the Commission believes that mandates are required in this instance, Joint CLECs request that the Commission require AT&T to measure CLECs' power usage using hand held metering.

May 10, 2006

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